#### ANNEX I

# SUCCESSFUL AI-ENABLED PROJECTS ON INDUSTRIAL TECHNOLOGIES AND MANUFACTURE

# <u>Final Report Summary - ECOSHOPPING (Energy efficient & Cost competitive retrofitting solutions for Shopping buildings)</u>

Commercial buildings show high energy saving potential by the refurbishment of envelope and applying easy-to-install and cost-effective building services solutions. Completed with an improved operation and maintenance, the EcoShopping brings affordable solution to the market...

Project: ECOSHOPPING (ID: 609180)

#### FIRST virtual Factories: Interoperation suppoRting buSiness innovaTion

ID: 734599

From: 1 January 2017 to: 31 December 2022

The manufacturing industry is entering a new era in which new ICT technologies and collaboration applications are integrated with traditional manufacturing practices and processes, which brings virtual organisations to factories, i.e. Manufacturing 2.0. Virtual factory to...

Coordinated in: United Kingdom

Programme: EXCELLENT SCIENCE - Marie Skłodowska-Curie Actions, Stimulating

innovation by means of cross-fertilisation of knowledge

Last update: 1 February 2024

Add to my booklet

### QU4LITY Digital Reality in Zero Defect Manufacturing

ID: 825030

From: 1 January 2019 to: 31 July 2022

QU4LITY will demonstrate, in a realistic, measurable, and replicable way an open, certifiable and highly standardised, SME-friendly and transformative shared data-driven ZDM product and service model for Factory 4.0 through 5 strategic ZDM plug & control lighthouse equipment...

Coordinated in: Spain

Programme: INDUSTRIAL LEADERSHIP - Leadership in enabling and industrial

technologies - Information and Communication Technologies (ICT)

Last update: 11 December 2023

Add to my booklet

#### XMANAI Explainable Manufacturing Artificial Intelligence

ID: 957362

From: 1 November 2020 to: 30 April 2024

"Despite the indisputable benefits of AI, humans typically have little visibility and knowledge on how AI systems make any decisions or predictions due to the so-called "black-box effect" in which many of the machine learning/deep learning algorithms are not able to be...

Coordinated in: Italy

Programme: INDUSTRIAL LEADERSHIP - Leadership in enabling and industrial

technologies - Information and Communication Technologies (ICT)

Last update: 4 December 2023

Add to my booklet

SHAREWORK Safe and effective HumAn-Robot coopEration toWards a better cOmpetiveness on cuRrent automation lacK manufacturing processes.

ID: 820807

From: 1 November 2018 to: 31 October 2022

SHAREWORK's main objective is to endow an industrial work environment of the necessary "intelligence" and methods for the effective adoption of Human Robot Collaboration (HRC) with not fences, providing a system capable of understanding the environment and human actions...

Coordinated in: Spain

Programme: <u>INDUSTRIAL LEADERSHIP - Leadership in enabling and industrial</u> technologies - Advanced manufacturing and processing, Technologies for Factories of the

**Future** 

Last update: 16 July 2023 Add to my booklet

TheFSM The Food Safety Market: an SME-powered industrial data platform to boost the competitiveness of European food certification

ID: 871703

From: 1 February 2020 to: 31 January 2023

The Food Safety Market (TheFSM) aims to deliver an industrial data platform that will significantly boost the way that food certification takes place in Europe. It brings together and builds upon existing innovations from innovative ICT SMEs to deliver a uniquely open and...

Coordinated in: Greece

Programme: INDUSTRIAL LEADERSHIP - Leadership in enabling and industrial

technologies - Information and Communication Technologies (ICT)

Last update: 19 December 2023

Add to my booklet

SERENA VerSatilE plug-and-play platform enabling remote pREdictive mainteNAnce

ID: 767561

From: 1 October 2017 to: 31 March 2021

The growing complexity of modern engineering systems and manufacturing processes is an obstacle to concept and implement Intelligent Manufacturing Systems (IMS) and keep these systems operating at high levels of reliability. Additionally, the number of sensors and the amount...

Coordinated in: Italy

Programme: <u>INDUSTRIAL LEADERSHIP</u> - <u>Leadership in enabling and industrial</u> technologies - Advanced manufacturing and processing, Technologies for Factories of the

**Future** 

Last update: 4 September 2022

Add to my booklet

vf-OS Virtual Factory Open Operating System

ID: 723710

From: 1 October 2016 to: 31 October 2019

The primary outcomes of vf-OS are an:- Open Operating System (vf-OS) and Software Development Kit (OAK) for Factories of the Future that aims to be the reference system software for collaborative manufacturing and logistics processes including its associated resources and...

Coordinated in: United Kingdom

Programme: INDUSTRIAL LEADERSHIP - Leadership in enabling and industrial

technologies - Information and Communication Technologies (ICT)

Last update: 18 August 2022

Add to my booklet

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Coordinated in: Italy

Programme: INDUSTRIAL LEADERSHIP - Leadership in enabling and industrial

technologies - Information and Communication Technologies (ICT)

Last update: 4 December 2023

Add to my booklet

### <u>Final Report Summary - PACE-NET PLUS (Pacific Europe Network for Science, Technology</u> and Innovation)

PACE-Net Plus is a project funded by the European Commission to support the institutional bi-regional policy dialogue in STI between the Pacific region and the European Union; strengthen the bi-regional cooperation between research and innovation actors, especially in the...

Project: PACE-NET PLUS (ID: 609490)

Programme: Specific Programme "Capacities": International co-operation

Last update: 13 September 2017

Add to my booklet

### Final Report Summary - NANO3BIO (NanoBioEngineering of BioInspired BioPolymers)

Nano3Bio has been a huge challenge, exciting research, and a rewarding experience! We had a large international and interdisciplinary consortium of academic and industrial partners to cover all relevant aspects of the subject, to allow us to successfully and efficiently...

Project: NANO3BIO (ID: 613931)

Programme: Specific Programme "Cooperation": Food, Agriculture and Biotechnology

Last update: 23 March 2018

Add to my booklet

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From: 1 October 2016 to: 31 October 2019

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Coordinated in: United Kingdom

Programme: INDUSTRIAL LEADERSHIP - Leadership in enabling and industrial

technologies - Information and Communication Technologies (ICT)

Last update: 18 August 2022

Add to my booklet

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Coordinated in: Italy

Programme: <u>INDUSTRIAL LEADERSHIP - Leadership in enabling and industrial technologies - Advanced manufacturing and processing</u>, <u>Technologies for Factories of the Future</u>

Last update: 4 September 2022

Add to my booklet

### PrismArch Virtual reality aided design blending cross-disciplinary aspects of architecture in a multi-simulation environment

ID: 952002

From: 1 November 2020 to: 31 January 2023

The recent past of the AEC industry is characterized by digital breakthroughs that have dramatically shaped the design process. The powerful programs that are currently available offer unlimited possibilities, allowing complex and creative designs to be modelled accurately...

Coordinated in: Greece

Programme: INDUSTRIAL LEADERSHIP - Leadership in enabling and industrial

technologies - Information and Communication Technologies (ICT)

Last update: 27 December 2023

Add to my booklet

# <u>DREAM-ON Structural damage</u>: robust, real-time, and data-driven adaptive modeling for online control

ID: 101002857

From: 1 June 2021 to: 31 May 2026

Diagnosing structural damage and predicting its evolution has been a perpetual engineering issue. It is nowadays the topic of intensive research works addressing online damage detection and control, and benefiting from experimental and numerical advances made during the last...

Coordinated in: France

Programme: EXCELLENT SCIENCE - European Research Council (ERC)

Last update: 21 April 2022 Add to my booklet

### AIMS5.0 Artificial Intelligence in Manufacturing leading to Sustainability and Industry5.0

ID: 101112089

From: 1 May 2023 to: 30 April 2026

AIMS5.0, a collaborative Innovation Action aims at strengthening European digital sovereignty in comprehensively sustainable production, by adopting, extending and implementing AI-enabled hardware and software components and systems across the whole industrial value chain to...

Coordinated in: Germany

Programme: Digital, Industry and Space, Key Digital Technologies

Last update: 7 December 2023

Add to my booklet

# THOMAS Mobile dual arm robotic workers with embedded cognition for hybrid and dynamically reconfigurable manufacturing systems

ID: 723616

From: 1 October 2016 to: 31 March 2021

The productivity of the serial production model is compromised by the need to perform changes in the production equipment that cannot support multiple operations in dynamic environments. Low cost labour is no longer an option for EU manufacturers due to the fast rise of wages...

Coordinated in: Greece

Programme: INDUSTRIAL LEADERSHIP - Leadership in enabling and industrial technologies - Advanced manufacturing and processing, Technologies for Factories of the

**Future** 

Last update: 23 August 2022

Add to my booklet

### SOCRATES SOcial Cognitive Robotics in The European Society

ID: 721619

From: 1 November 2016 to: 31 October 2020

SOCRATES is a PhD training program for 15 young researchers, created to develop the field of Social Robotics with an application focus on Robotics in Eldercare. The research in Social Robotics has a common theme of Interaction Quality, which is a concept for

characterization...

Coordinated in: Sweden

Programme: EXCELLENT SCIENCE - Marie Skłodowska-Curie Actions, Fostering new

skills by means of excellent initial training of researchers

Last update: 5 April 2023 Add to my booklet

### NOMAD CoE Novel Materials Discovery

ID: 951786

From: 1 October 2020 to: 31 March 2024

Predicting novel materials with specific desirable properties is a major aim of ab initio computational materials science (aiCMS) and an urgent requirement of basic and applied materials science, engineering and industry. Such materials can have immense impact on the...

Coordinated in: Germany

Programme: <u>Development</u>, <u>deployment</u> and <u>operation of ICT-based e-infrastructures</u>, <u>EXCELLENT SCIENCE - Research Infrastructures</u>

Last update: 22 January 2024

Add to my booklet

# REMODEL Robotic tEchnologies for the Manipulation of cOmplex Deformable Linear objects

ID: 870133

From: 1 November 2019 to: 31 October 2023

REMODEL will enable new production environments, where the manufacturing of complex products composed of multiple wires and cables by means of dual-arm robots is not only possible, but fully integrated with the product design chain. This result will be achieved by exploiting...

Coordinated in: Italy

Programme: <u>INDUSTRIAL LEADERSHIP - Leadership in enabling and industrial</u> technologies - Advanced manufacturing and processing, <u>Technologies for Factories of the</u>

Future

Last update: 18 December 2023

Add to my booklet

PROJECT

### SWAG SOFT WEARABLE ASSISTIVE GARMENTS FOR HUMAN EMPOWERMENT

ID: 101120408

From: 1 November 2023 to: 31 October 2027

"Soft robotics has become one of the fastest growing fields over the last decade, and the development of technologies related to the associated modelling, sensing, actuation and control challenges has flourished as part of the field's impetus. Soft robots have been...

Coordinated in: Greece

Programme: Digital, Industry and Space, Artificial Intelligence and Robotics

Last update: 30 June 2023 Add to my booklet

# TRANSACT Transform safety-critical cyber-physical systems into distributed solutions for end-users and partners

ID: 101007260

From: 1 June 2021 to: 31 May 2024

"Market trends show advanced usage of safety-critical systems with novel services based on smart data analytics. Customers require continuous updates to applications and services and seek lower cost (Bill-of-Material, BoM) and easy to install solutions (maintenance) for...

Coordinated in: Netherlands

Programme: ECSEL, INDUSTRIAL LEADERSHIP - Leadership in enabling and industrial

technologies - Information and Communication Technologies (ICT)

Last update: 2 January 2024

Add to my booklet

# PULSATE Fostering the PAN-European infrastructure for empowering SMEs digital competences in laser-based advance and additive manufacturing.

ID: 951998

From: 1 September 2020 to: 31 August 2024

Digitizing European industry is essential for European competitivity in the 21st century, but only 1/5 of EU SMEs is highly digitised. Laser Based Advanced and Additive Manufacturing (LBAAM) technologies are regarded as Key Enablers for Digital Production and offer important...

Coordinated in: Spain

Programme: INDUSTRIAL LEADERSHIP - Leadership in enabling and industrial

technologies - Information and Communication Technologies (ICT)

Last update: 24 January 2024

Add to my booklet

# <u>OPEN\_NEXT Company-Community Collaboration for Open Source Development of products and services</u>

ID: 869984

From: 1 September 2019 to: 30 November 2022

OPEN!NEXT enables SMEs to engage in company-community collaboration (C3) for means of co-development and market exploitation of Open Source Hardware (OSH) products and related services. OSH is an increasingly viable approach to intellectual property management extending the...

Coordinated in: Germany

Programme: <u>INDUSTRIAL LEADERSHIP - Leadership in enabling and industrial</u> technologies - Advanced manufacturing and processing, Technologies for Factories of the

<u>Future</u>

Last update: 23 July 2023 Add to my booklet

### euROBIN European ROBotics and AI Network

ID: 101070596

From: 1 July 2022 to: 30 June 2026

As robots are entering unstructured environments with a large variety of tasks, they will need to quickly acquire new abilities to solve them. Humans do so very effectively through a variety of methods of knowledge transfer – demonstration, verbal explanation, writing, the...

Coordinated in: Germany

Programme: Digital, Industry and Space, Artificial Intelligence and Robotics

Last update: 4 September 2022

Add to my booklet

# Z-Fact0r Zero-defect manufacturing strategies towards on-line production management for European factories

ID: 723906

From: 1 October 2016 to: 31 March 2020

Manufacturing represents approximately 21 % of the EU's GDP and 20 % of its employment, providing more than 30 million jobs in 230 000 enterprises, mostly SMEs. Moreover, each job in industry is considered to be linked to two more in related services. European manufacturing...

Coordinated in: Greece

Programme: <u>INDUSTRIAL LEADERSHIP - Leadership in enabling and industrial technologies - Advanced manufacturing and processing</u>, <u>Technologies for Factories of the Future</u>

Last update: 18 August 2022

Add to my booklet

### L2D2 Laser digital transfer of 2D materials enabled photonics: from the lab 2 the fab

ID: 101058079

From: 1 October 2022 to: 30 September 2025

To unveil the true potential of graphene and 2D materials and address the increasing demand for industrial applications, it is essential to develop upscaling growth technologies which preserve the pristine quality at large wafer size and enable the wafer-scale integration of...

Coordinated in: Greece

Programme: The European Innovation Council (EIC)

Last update: 4 September 2022

Add to my booklet

### EUROBENCH EUropean ROBotic framework for bipedal locomotion bENCHmarking

ID: 779963

From: 1 January 2018 to: 30 June 2022

The EUROBENCH project aims at creating the first benchmarking framework for robotic systems in Europe. The framework will allow companies and researchers to test the performance of robots at any stage of development. The project will primarily focus on bipedal machines, i.e...

Coordinated in: Spain

Programme: INDUSTRIAL LEADERSHIP - Leadership in enabling and industrial

technologies - Information and Communication Technologies (ICT)

Last update: 29 April 2023

Add to my booklet

### XR5.0 Human-Centric AI-Enabled Extended Reality Applications for the Industry 5.0 Era

ID: 101135209

From: 1 January 2024 to: 31 December 2026

XR5.0 will build, demonstrate, and validate a novel Person-Centric and AI-based XR paradigm that will be tailored to the requirements and nature of I5.0 applications. In this direction, the project will specify structuring principles and blueprints for using XR in I5.0...

Coordinated in: Italy

Programme: Digital, Industry and Space, Emerging enabling technologies

Last update: 3 November 2023

Add to my booklet

### <u>DEFACTO Battery DEsign and manuFACTuring Optimization through multiphysic</u> modelling

ID: 875247

From: 1 January 2020 to: 31 December 2023

The DEFACTO project rationale is to develop a multiphysic and multiscale modelling integrated tool to better understand the material, cell and manufacturing process behaviour, therefore allowing to accelerate cell development and the R&I process. This approach will allow

Coordinated in: Spain

Programme: SOCIETAL CHALLENGES - Smart, Green And Integrated Transport

Last update: 22 January 2024

Add to my booklet

### EXCELLERAT The European Centre of Excellence for Engineering Applications

ID: 823691

From: 1 December 2018 to: 31 May 2022

"Engineering applications will be among the first exploiting exascale, not only in academia but also industry. In fact, the industrial engineering field is \*the\* industrial field with the highest exascale potential, thus EXCELLERAT brings together the necessary European...

Coordinated in: Germany

Programme: <u>Development</u>, <u>deployment</u> and <u>operation of ICT-based e-infrastructures</u>, <u>EXCELLENT SCIENCE - Research Infrastructures</u>

Last update: 12 September 2023

Add to my booklet

### BIM2TWIN BIM2TWIN: Optimal Construction Management & Production Control

ID: 958398

From: 1 November 2020 to: 30 April 2024

BIM2TWIN aims to build a Digital Building Twin (DBT) platform for construction management that implements lean principles to reduce operational waste of all kinds, shortening schedules, reducing costs, enhancing quality and safety and reducing carbon footprint. BIM2TWIN...

Coordinated in: France

Programme: Technologies enabling energy-efficient systems and energy-efficient buildings with a low environmental impact, INDUSTRIAL LEADERSHIP - Leadership in enabling and industrial technologies - Advanced manufacturing and processing

Last update: 28 December 2023

Add to my booklet

### PERKS Eliciting and Exploiting Procedural Knowledge in Industry 5.0

ID: 101120323

From: 1 October 2023 to: 30 September 2026

Procedural Knowledge (PK) is knowing-how to perform some tasks. For industry workers, PK is the knowledge required to carry out a specific job, like correctly executing the safety procedure during maintenance interventions, or configuring an industrial system by following the...

Coordinated in: Italy

Programme: Digital, Industry and Space, Artificial Intelligence and Robotics

Last update: 14 July 2023 Add to my booklet

Better Factory Grow your manufacturing business

ID: 951813

From: 1 October 2020 to: 30 September 2024

Better Factory will provide methodology for Manufacturing SMEs to collaborate with Artists to develop new and personalized products. At the same time Better Factory will provide technology for SMEs to become fully connected cyber-physical-systems, transforming them into...

Coordinated in: Finland

Programme: INDUSTRIAL LEADERSHIP - Leadership in enabling and industrial

technologies - Information and Communication Technologies (ICT)

Last update: 30 January 2024

Add to my booklet

CoRob-X Cooperative Robots for Extreme Environments

ID: 101004130

From: 1 March 2021 to: 28 February 2023

CoRob-X develops and demonstrates enabling technologies for multi-agent robotic teams. The primary target application is the exploration of planetary surfaces, with a focus on hardto-reach areas. CoRob-X builds on robotic hardware provided by the project consortium and...

Coordinated in: Germany

Programme: Enabling European competitiveness, non-dependence and innovation of the

European space sector, Enabling advances in space technology, INDUSTRIAL

LEADERSHIP - Leadership in enabling and industrial technologies – Space

Last update: 27 December 2023

Add to my booklet

### PROFIT Process Plant Reliable Operations Facilitated and Enhanced by Information **Technology**

ID: 5352

From: 2 January 1991 to: 1 July 1993

The objective of this project is to develop an integrated framework for the plant-wide management of industries, such as chemical and oil, which use complex interlinked processes. The project combines control theory algorithmic techniques and Artificial Intelligence concepts.

Coordinated in: Greece

Programme: European strategic programme (EEC) for research and development in

information technologies (ESPRIT), 1987-1992

Last update: 17 June 1994 Add to my booklet

<u>DIACAT Diamond materials for the photocatalytic conversion of CO2 to fine chemicals and</u> fuels using visible light

ID: 665085

From: 1 July 2015 to: 31 December 2019

In DIACAT we propose the development of a completely new technology for the direct photocatalytic conversion of CO2 into fine chemicals and fuels using visible light. The approach utilises the unique property of man-made diamond, now widely available at low economic cost, to...

Coordinated in: Germany

Programme: EXCELLENT SCIENCE - Future and Emerging Technologies (FET), FET Open

Last update: 27 June 2023

Add to my booklet

### RADIATE Research And Development with Ion Beams – Advancing Technology in Europe

ID: 824096

From: 1 January 2019 to: 30 June 2023

Fifteen partners from public research and four industrial partners, sharing the vision of structuring the ERA in the field of ion technology application and innovation, join forces in the RADIATE project. Largely com-plementary national ion beam facilities will be integrated...

Coordinated in: Germany

Programme: Integrating and opening existing national and regional research infrastructures of

European interest, EXCELLENT SCIENCE - Research Infrastructures

Last update: 1 February 2024

Add to my booklet

### SME 5.0 A Strategic Roadmap Towards the Next Level of Intelligent, Sustainable and Human-Centred SMEs

ID: 101086487

From: 1 January 2023 to: 31 December 2026

Over the last ten years many efforts have been made to transfer Industry 4.0 from research to practice. Recently, great progress has been made to introduce also SMEs to the use of Industry 4.0. The next big challenge for SMEs will be to implement the dual (or twin)...

Coordinated in: Italy

Programme: Marie Skłodowska-Curie Actions (MSCA)

Last update: 21 October 2022

Add to my booklet

### SISHOT Single-shot, ultrashort laser pulse characterization based on the dispersion scan technique

ID: 101058075

From: 1 September 2022 to: 31 August 2025

Ultrashort laser pulses are prominent enabling tools in countless advanced applications, ranging from fundamental research to medical and industrial use. However, straightforward characterization of ultrashort laser pulses remains a nontrivial task. The proposed project...

Coordinated in: Sweden

Programme: The European Innovation Council (EIC)

Last update: 28 July 2022

Add to my booklet

### CLARUS Optimizing Production and Logistic Resources in the Time-critical Bio Production Industries in Europe

ID: 101070076

From: 1 September 2022 to: 31 August 2025

The CLARUS project aims to connect the Sustainable Paradigm in the food industry and AI-based applications, with the goal of developing a platform with high communications and processing capabilities, as well as the use of standardized open protocols and data models that will...

Coordinated in: Italy

Programme: Digital, Industry and Space, Artificial Intelligence and Robotics

Last update: 5 August 2022

Add to my booklet

### CIRC4Life A circular economy approach for lifecycles of products and services

ID: 776503

From: 1 May 2018 to: 31 October 2021

This project aims to develop and implement a circular economy approach for sustainable products and services through their value and supply chains. Three new circular economy business models will be developed including (i) co-creation of products and services, (ii) sustainable...

Coordinated in: United Kingdom

Programme: SOCIETAL CHALLENGES - Climate action, Environment, Resource

Efficiency and Raw Materials, Enabling the transition towards a green economy and society

through eco-innovation
Last update: 5 April 2023
Add to my booklet

### ScalABLE4.0 Scalable automation for flexible production systems

ID: 723658

From: 1 January 2017 to: 30 June 2020

The main objective of the ScalABLE 4.0 project is the development and demonstration of an open scalable production system framework (OSPS) that can be used efficiently and effectively to visualize, virtualize, construct, control, maintain and optimize production lines.

The...

Coordinated in: Portugal

Programme: INDUSTRIAL LEADERSHIP - Leadership in enabling and industrial

technologies - Information and Communication Technologies (ICT)

Last update: 4 September 2022

Add to my booklet

### MANUELA Additive Manufacturing using Metal Pilot Line

ID: 820774

From: 1 October 2018 to: 31 March 2023

Metal additive manufacturing (AM) allows, by enabling use of advanced design, production of high added value components, at levels that cannot be reached with conventional manufacturing technique. Still, the AM-based manufacturing sequence implies large amounts of critical...

Coordinated in: Sweden

Programme: <u>INDUSTRIAL LEADERSHIP - Leadership in enabling and industrial</u> technologies - Advanced manufacturing and processing, <u>Technologies for Factories of the</u>

<u>Future</u>

Last update: 1 February 2024

Add to my booklet

Electro-Intrusion Simultaneous transformation of ambient heat and undesired vibrations into electricity via nanotriboelectrification during non-wetting liquid intrusion-extrusion into-from nanopores

ID: 101017858

From: 1 January 2021 to: 31 December 2025

Greenhouse gas emissions, pollution and rational energy use are civilization-scale challenges which need to be resolved urgently, in particular by the conversion of abundant waste heat and undesired vibrations into useful electricity. However, the low efficiency of existing...

Coordinated in: Spain

Programme: EXCELLENT SCIENCE - Future and Emerging Technologies (FET), FET

Proactive

Last update: 28 December 2023

Add to my booklet

### **DIGICOR** Decentralised Agile Coordination Across Supply Chains

ID: 723336

From: 1 October 2016 to: 30 September 2019

European manufacturing competes in a global knowledge-driven economy, and thus increasingly seeks competitive advantage through quality, agility and personalisation based on latest advances in IT. Increasing utilisation of IT in mission-critical elements of the production...

Coordinated in: Germany

Programme: INDUSTRIAL LEADERSHIP - Leadership in enabling and industrial

technologies - Information and Communication Technologies (ICT)

Last update: 17 August 2022

Add to my booklet

### PAM^2 Precision Additive Metal Manufacturing

ID: 721383

From: 1 December 2016 to: 30 November 2020

Additive Manufacturing (AM) is a fast–growing sector with the ability to evoke a revolution in manufacturing due to its almost unlimited design freedom and its capability to produce personalised parts locally and with efficient material use. AM companies however still face...

Coordinated in: Belgium

Programme: EXCELLENT SCIENCE - Marie Skłodowska-Curie Actions, Fostering new skills by means of excellent initial training of researchers

Last update: 2 August 2021

Add to my booklet

# TRINITY Digital Technologies, Advanced Robotics and increased Cyber-security for Agile Production in Future European Manufacturing Ecosystems

ID: 825196

From: 1 January 2019 to: 30 June 2023

The main objective of TRINITY is to create a network of multidisciplinary and synergistic local digital innovation hubs (DIHs) composed of research centers, companies, and university groups that cover a wide range of topics that can contribute to agile production: advanced...

Coordinated in: Finland

Programme: INDUSTRIAL LEADERSHIP - Leadership in enabling and industrial

technologies - Information and Communication Technologies (ICT)

Last update: 11 December 2023

Add to my booklet

### FF4EuroHPC FF4EUROHPC: HPC INNOVATION FOR EUROPEAN SMES

ID: 951745

From: 1 September 2020 to: 31 October 2023

The FF4EuroHPC proposal addresses the need for outreach to, and support of, Europe's Small and Medium-sized Enterprises (SMEs) in order that they can profit from the innovation advantages offered by advanced High Performance Computing (HPC) technologies and services...

Coordinated in: Germany

Programme: INDUSTRIAL LEADERSHIP - Leadership in enabling and industrial technologies - Information and Communication Technologies (ICT), Next generation computing: Advanced and secure computing systems and technologies, including cloud

computing

Last update: 27 December 2023

Add to my booklet

#### **ANNEX II**

#### AI-ENABLED AUGMENTED MEDICINE AND HEALTH CARE

### HosmartAI Hospital Smart development based on AI

ID: 101016834

From: 1 January 2021 to: 31 May 2024

"HosmartAI will create a common open Integration Platform with the necessary tools to facilitate and measure the benefits of integrating digital technologies (robotics and AI) in the healthcare system. A central hub will offer multi-faceted lasting functionalities...

Coordinated in: Belgium

Programme: INDUSTRIAL LEADERSHIP - Leadership in enabling and industrial

technologies - Information and Communication Technologies (ICT)

Last update: 28 December 2023

#### PROJECT

### BRAINTEASER BRinging Artificial INTelligencE home for a better cAre of amyotrophic lateral sclerosis and multiple SclERosis

ID: 101017598

From: 1 January 2021 to: 31 December 2024

Amyotrophic Lateral Sclerosis (ALS) and Multiple Sclerosis (MS) are chronic diseases characterized by progressive or alternate impairment of neurological functions (motor, sensory, visual, cognitive). Patients have to manage alternated periods in hospital with care at home...

Coordinated in: Spain

Programme: <u>SOCIETAL CHALLENGES</u> - Health, demographic change and wellbeing, <u>Individual awareness and empowerment for self-management of health</u>

Last update: 5 February 2024

Add to my booklet

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Coordinated in: Belgium

Programme: INDUSTRIAL LEADERSHIP - Leadership in enabling and industrial

technologies - Information and Communication Technologies (ICT)

Last update: 28 December 2023

Add to my booklet

# BD4QoL Big Data Models and Intelligent tools for Quality of Life monitoring and participatory empowerment of head and neck cancer survivors

ID: 875192

From: 1 January 2020 to: 31 December 2024

Head and neck cancer can take away a patient's "right to feel human," and its impact on physical appearance, physical functioning, psychological status and general quality of life (QoL) can be devastating. Over the past several decades, the number of patients who survive...

Coordinated in: Italy

Programme: SOCIETAL CHALLENGES - Health, demographic change and well-

being, Improving halth information and better use of health data, Transferring knowledge to

clinical practice and scalable innovation actions

Last update: 19 December 2023

Add to my booklet

### WARIFA Watching the risk factors: Artificial intelligence and the prevention of chronic conditions

ID: 101017385

From: 1 January 2021 to: 31 December 2024

Digital healthcare may prevent poor health. Personalised early risk prediction by artificial intelligence can empower citizens to adopt healthier habits and a better lifestyle. This project aims at defining a general personalised early risk prediction model that will be used...

Coordinated in: Norway

Programme: <u>SOCIETAL CHALLENGES</u> - <u>Health</u>, <u>demographic change and wellbeing</u>, <u>Individual awareness and empowerment for self-management of health</u>

Last update: 28 December 2023

Add to my booklet

# ONCORELIEF A digital guardian angel enhancing cancer patient's wellbeing and health status improvement following treatment.

ID: 875392

From: 1 January 2020 to: 30 June 2023

The burden of cancer is rising globally and is estimated to have reached 18.1 million new cases and 9.6 million cancer deaths in 2018. Despite the rising cancer incidence, improvements in early detection and therapeutic treatment have improved cancer survival. As

a...

Coordinated in: United Kingdom

Programme: SOCIETAL CHALLENGES - Health, demographic change and well-

being, Improving halth information and better use of health data, Transferring knowledge to clinical practice and scalable innovation actions

I a 20 I 2024

Last update: 29 January 2024

Add to my booklet

### CONNECARE Personalised Connected Care for Complex Chronic Patients

ID: 689802

From: 1 April 2016 to: 31 December 2019

The ambition of the CONNECARE consortium is to co-design, develop, deploy, and evaluate a novel smart, adaptive integrated care system for chronic care management. This will save European healthcare organisations huge sums whilst improving patient outcomes. The consortium...

Coordinated in: Spain

Programme: SOCIETAL CHALLENGES - Health, demographic change and well-

being, Health care provision and integrated care

Last update: 10 February 2023

Add to my booklet

ENVISION Intelligent plug-and-play digital tool for real-time surveillance of COVID-19 patients and smart decision-making in Intensive Care Units

ID: 101015930

From: 1 December 2020 to: 31 July 2023

Within only six months, over 7.4 million people have been diagnosed with SARS-CoV-2. In the most severely hit countries, more than 10% of infected patients have received treatment in Intensive Care Units (ICUs). Insufficient data and limited knowledge on the disease as well as...

Coordinated in: Germany

Programme: SOCIETAL CHALLENGES - Health, demographic change and well-being

Last update: 27 December 2023

Add to my booklet

HumanE-AI-Net HumanE AI Network

ID: 952026

From: 1 September 2020 to: 31 August 2024

The HumanE AI Net brings together top European research centers, universities and key industrial champions into a network of centers of excellence that goes beyond a narrow definition of AI and combines world leading AI competence with key players in related areas

Coordinated in: Germany

Programme: INDUSTRIAL LEADERSHIP - Leadership in enabling and industrial

technologies - Information and Communication Technologies (ICT)

Last update: 24 January 2024

Add to my booklet

ASCAPE Artificial intelligence Supporting CAncer Patients across Europe

ID: 875351

From: 1 January 2020 to: 30 June 2023

The latest cancer statistics highlight encouraging advances in decreasing cancer-related mortality. However, given that one in two people will be diagnosed with cancer in their lifetime, and due to the growing and ageing population, the absolute number of people living with...

Coordinated in: Greece

Programme: SOCIETAL CHALLENGES - Health, demographic change and well-

being, Improving halth information and better use of health data, Transferring knowledge to

clinical practice and scalable innovation actions

Last update: 19 September 2023

Add to my booklet

HBP SGA2 Human Brain Project Specific Grant Agreement 2

ID: 785907

From: 1 April 2018 to: 31 March 2020

The Human Brain Project (HBP) is a major European scientific research initiative to improve our understanding of the brain and the role it plays in making us human, and to exploit the

opportunities offered by the resulting knowledge. The size and complexity of the brain make...

Coordinated in: Switzerland

Programme: EXCELLENT SCIENCE - Future and Emerging Technologies (FET), FET

**Flagships** 

Last update: 23 November 2023

Add to my booklet

### **COUCH Council of Coaches**

ID: 769553

From: 1 September 2017 to: 31 August 2020

Despite the proliferation of ICT solutions for personalized healthcare, there is still no easy way to provide older adults with integrated coaching services. Council of Coaches (COUCH) introduces a radically new virtual coaching concept based on multiple autonomous, embodied...

Coordinated in: Netherlands

Programme: SOCIETAL CHALLENGES - Health, demographic change and well-

being, Active ageing and self-management of health

Last update: 25 August 2022

Add to my booklet

<u>CINDERELLA Clinical Validation of an AI-based approach to improve the shared decision-making process and outcomes in Breast Cancer Patients proposed for Locoregional treatment</u>

ID: 101057389

From: 1 June 2022 to: 31 May 2026

Breast cancer is the most commonly diagnosed cancer, with an estimated 2.3 million new cases per year globally. Approximately 90% of these patients will undergo breast surgery with/without radiation (locoregional treatment). Different surgical techniques can be offered to the...

Coordinated in: Portugal

Programme: Health, Tools, Technologies and Digital Solutions for Health and Care, including

personalised medicine

Last update: 4 September 2022

Add to my booklet

# BESAFE ARTIFICIAL INTELLIGENCE ENHANCEMENT OF SURGICAL TECHNOLOGY FOR THE REDUCTION OF HUMAN BEHAVIOUR-RELATED SURGICAL ACCIDENTS

ID: 847378

From: 1 May 2019 to: 30 April 2020

BESAFE seeks to support the exploitation of the results from the IBSEN FET project and capture a market opportunity as well as address a poignant societal need, the reduction of intra-operative accidents and surgery costs by means of clinical decision support software.IBSEN...

Coordinated in: Spain

Programme: EXCELLENT SCIENCE - Future and Emerging Technologies (FET), FET Open

Last update: 17 August 2022

Add to my booklet

DPOIECT

# TOLIFE Combining Artificial Intelligence and smart sensing TOward better management and improved quality of LIFE in chronic obstructive pulmonary disease

ID: 101057103

From: 1 September 2022 to: 28 February 2027

Chronic obstructive pulmonary disease (COPD) is a highly prevalent chronic condition.

While COPD is a lung disease, it is mainly the exacerbations and extrapulmonary

comorbidities which affect the quality of life, health care costs, and prognosis. The optimal

COPD treatment... Coordinated in: Italy

Programme: Health, Tools, Technologies and Digital Solutions for Health and Care, including

personalised medicine
Last update: 28 July 2022
Add to my booklet

### CHAIMELEON Accelerating the lab to market transition of AI tools for cancer management

ID: 952172

From: 1 September 2020 to: 28 February 2025

CHAIMELEON aims to set up a structured repository for health imaging data to be openly reused in AI experimentation for cancer management. An EU-wide repository will be built as a distributed infrastructure in full compliance with legal and ethics regulations in the involved...

Coordinated in: Spain

Programme: SOCIETAL CHALLENGES - Health, demographic change and well-

being, Methods and data Last update: 5 February 2024

Add to my booklet

### AI tools could offer cancer patients more personalised aftercare

Effectively profiling risks to cancer patients during aftercare, would boost quality of life and survival rates. CLARIFY's artificial intelligence-driven digital tools help clinicians deliver more tailored treatment.

Project: CLARIFY (ID: 875160)

Available languages: DEENESFRITPL

Last update: 15 December 2023

Add to my booklet

# <u>Final Report Summary - NUDGE-IT (The Neurobiology of Decision-Making in Eating - Innovative Tools)</u>

Nudge-it was a multidisciplinary, multinational project funded by the European Union FP7 programme to address the need for a better understanding of the determinants of food choice. The project engaged experts in the neurobiology of motivational behaviour, the neuroscience of

Project: NUDGE-IT (ID: 607310)

Programme: Specific Programme "Cooperation": Food, Agriculture and Biotechnology

Last update: 2 October 2020

Add to my booklet

HTx Next Generation Health Technology Assessment to support patient-centred, societally oriented, real-time decision-making on access and reimbursement for health technologies throughout Europe

ID: 825162

From: 1 January 2019 to: 30 June 2024

HTx will create a framework for next generation Health Technology Assessment (HTA) that supports patient-centred, societally oriented, and real-time decision-making for integrated healthcare throughout Europe. HTx will focus on therapeutic areas with high unmet need for which...

Coordinated in: Netherlands

Programme: SOCIETAL CHALLENGES - Health, demographic change and well-

being, Health care provision and integrated care

Last update: 2 February 2024

Add to my booklet

### HBP SGA1 Human Brain Project Specific Grant Agreement 1

ID: 720270

From: 1 April 2016 to: 31 March 2018

Understanding the human brain is one of the greatest scientific challenges of our time. Such an understanding can provide profound insights into our humanity, leading to fundamentally new computing technologies, and transforming the diagnosis and treatment of brain disorders...

Coordinated in: Switzerland

Programme: EXCELLENT SCIENCE - Future and Emerging Technologies (FET)

Last update: 28 February 2023

Add to my booklet

# <u>Periodic Reporting for period 2 - PERSIST (Patients-centered SurvivorShIp care plan after Cancer treatments based on Big Data and Artificial Intelligence technologies)</u>

Cancer concerns all European citizens. 40% of us are likely to be affected and we all know someone who developed the disease. In 2020, 19.3 million of new cases appeared and there were 9.96 million deaths For a long time, cancer treatment has been the main focus of research...

Project: PERSIST (ID: 875406)

Programme: SOCIETAL CHALLENGES - Health, demographic change and well-being

Last update: 3 June 2022 Add to my booklet

FrailSafe Sensing and predictive treatment of frailty and associated co-morbidities using advanced personalized patient models and advanced interventions

ID: 690140

From: 1 January 2016 to: 30 April 2019

Ageing population is steeply increasing worldwide. A consequence of age related decline is the clinical condition of frailty. Frailty is a biological syndrome of decreased reserve and resistance to stressors, resulting from cumulative declines across multiple physiologic...

Coordinated in: Greece

Programme: SOCIETAL CHALLENGES - Health, demographic change and well-

being, Active ageing and self-management of health

Last update: 8 September 2023

Add to my booklet

### REACH2020 Responsive Engagement of the Elderly promoting Activity and Customized Healthcare

ID: 690425

From: 1 February 2016 to: 31 January 2020

The health expenditure in the EU is expected to rise by 350% by 2050 compared to an economic expansion of only 180% and the provision of Long Term Care (LTC) will pose an increasing challenge to the sustainability of public finances in the EU, due to an ageing population...

Coordinated in: Germany

Programme: SOCIETAL CHALLENGES - Health, demographic change and well-

being, Active ageing and self-management of health

Last update: 17 August 2022

Add to my booklet

# Periodic Reporting for period 1 - BRAINTEASER (BRinging Artificial INTelligencE home for a better cAre of amyotrophic lateral sclerosis and multiple SclERosis)

- BRAINTEASER is a 48 months project that started on January 1st 2021, co-funded by the European Union's Horizon 2020 research (grant agreement No 101017598) under the domain of the Health, demographic change and well-being. The BRAINTEASER Project driven by 11 partners from 6...
- Project: BRAINTEASER (ID: 101017598)
- Programme: <u>SOCIETAL CHALLENGES</u> Health, demographic change and wellbeing
- Last update: 9 May 2022Add to my booklet
- INTERVENE International consortium for integrative genomics prediction
- ID: 101016775
- From: 1 January 2021 to: 31 December 2025
- The aim of INTERVENE is to develop and test next generation tools for disease prevention, diagnosis, and personalised treatment utilizing the first US-European pool of genomic and health data and integrating longitudinal and disease-relevant -omics data into genetic risk...
- Coordinated in: Finland
- Programme: <u>SOCIETAL CHALLENGES</u> <u>Health</u>, <u>demographic change and wellbeing</u>, <u>Methods and data</u>
- Last update: 28 December 2023
- Add to my booklet

### <u>AI4HEALTHSEC A Dynamic and Self-Organized Artificial Swarm Intelligence Solution for Security and Privacy Threats in Healthcare ICT Infrastructures</u>

ID: 883273

From: 1 October 2020 to: 31 December 2023

The increasing interconnection of technology in healthcare between devices at the physical and cyber levels has transformed these infrastructures into large Health Care Information Infrastructures. Such HCIIs are considered critical and sensitive infrastructures due to their...

Coordinated in: Italy

Programme: Ensure privacy and freedom, including in the Internet and enhance the societal, legal and ethical understanding of all areas of security, risk and management, Improve cyber security, Secure societies - Protecting freedom and security of Europe and its citizens

Last update: 18 December 2023

Add to my booklet

# FAITH a Federated Artificial Intelligence solution for moniToring mental Health status after cancer treatment

ID: 875358

From: 1 January 2020 to: 30 June 2024

The main aim of FAITH is to apply the latest Artificial Intelligence (AI) and Big Data analytics techniques to better model and predict disease/treatment trajectories of cancer patients, with the goal of improving their quality of life and aftercare. To protect privacy of the...

Coordinated in: Ireland

Programme: SOCIETAL CHALLENGES - Health, demographic change and well-being, Improving halth information and better use of health data, Transferring knowledge to clinical practice and scalable innovation actions

Last update: 5 February 2024

Add to my booklet

# IM-TWIN from Intrinsic Motivations to Transitional Wearable INtelligent companions for autism spectrum disorder

ID: 952095

From: 1 November 2020 to: 31 October 2023

The IM-TWIN project aims to develop some of the outcomes of the FET GOAL-Robots project towards market exploitation. The basic-research FET GOAL-Robots project aimed to study how intrinsic motivations ("curiosity") drive exploration and learning in children, and how such...

Coordinated in: Italy

Programme: EXCELLENT SCIENCE - Future and Emerging Technologies (FET), FET

Proactive

Last update: 26 February 2023

Add to my booklet

# ORACLE Optimize risk prediction after myocardial infarction through artificial intelligence and multidimensional evaluation

ID: 101117469

From: 1 April 2024 to: 31 March 2029

Myocardial infarction (MI) is a leading cause of death worldwide. After MI, long-term antithrombotic therapy is crucial to prevent recurrent events, but increases bleeding, that also impacts morbidity and mortality. Giving these competing risks prediction tools to forecast...

Coordinated in: Spain

Programme: European Research Council (ERC)

Last update: 26 December 2023

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#### WellCO Wellbeing and Health Virtual Coach

ID: 769765

From: 1 December 2017 to: 31 January 2021

WellCo delivers a radical new ICT-based solution in the provision of personalised advice, guidance and follow-up of users for the adoption of healthier behaviour choices that help them to maintain or improve their physical cognitive, mental and social well-being for as long as...

Coordinated in: Spain

Programme: SOCIETAL CHALLENGES - Health, demographic change and well-

being, Active ageing and self-management of health

Last update: 22 August 2022

Add to my booklet

### RADAR-CNS Remote Assessment of Disease and Relapse in Central Nervous System

Disorders

ID: 115902

From: 1 April 2016 to: 31 March 2022

Background: Long term conditions require monitoring of patients, traditionally conducted in the clinic, to monitor treatment effects, adverse events and disease course. This can be inefficient and cumbersome – clinic visits may be too infrequent to identify individuals at...

Coordinated in: United Kingdom

Programme: SOCIETAL CHALLENGES - Health, demographic change and well-

being, Innovative Medicines Initiative 2 (IMI2)

Last update: 2 February 2024

Add to my booklet

### HeartMan Personal Decision Support System For Heart Failure Management

ID: 689660

From: 1 January 2016 to: 30 April 2019

1–2% of the developed world suffers from congestive heart failure (CHF), which is the most frequent cause of hospitalization in people aged over 65. CHF management involves medications, monitoring of fluid intake and weight, exercise and lifestyle modifications. Since most...

Coordinated in: Slovenia

Programme: SOCIETAL CHALLENGES - Health, demographic change and well-

being, Active ageing and self-management of health

Last update: 15 August 2022

Add to my booklet

### HBM4EU European Human Biomonitoring Initiative

ID: 733032

From: 1 January 2017 to: 30 June 2022

The overarching goal of the European Human Biomonitoring Initiative (HBM4EU) is to generate knowledge to inform the safe management of chemicals and so protect human health. We will use human biomonitoring to understand human exposure to chemicals and resulting health impacts...

Coordinated in: Germany

Programme: SOCIETAL CHALLENGES - Health, demographic change and well-

being, Preventing disease
Last update: 8 December 2023

Add to my booklet

# Periodic Reporting for period 1 - WARIFA (Watching the risk factors: Artificial intelligence and the prevention of chronic conditions)

The United Nations has specifically addressed the need for preventing noncommunicable diseases in their "2030 agenda for sustainable development". WHO defines noncommunicable diseases as Chronic Conditions (CCs) caused by a combination of genetic, physiological, environmental...

Project: <u>WARIFA</u> (ID: 101017385)

Programme: SOCIETAL CHALLENGES - Health, demographic change and well-being

Last update: 16 April 2023

Add to my booklet

### Breast cancer: EU funding for new tools and solutions

Breast cancer claims the lives of more European women than any other cancer: one in eight women in the EU will develop breast cancer before the age of 85. Data from the European Cancer Information System (ECIS) indicate more than 400 000 new cases were diagnosed in 2018. By improving the quality of breast cancer services in Europe, the European Commission Initiative on Breast Cancer (ECIBC) aims to help reduce the burden of cancer and decrease the avoidable differences in breast cancer incidence, prevalence, mortality and survival.

Available languages: DEENESFRITPL

Last update: 18 September 2019

Add to my booklet

### AI4MED Interdisciplinary Centre for Artificial Intelligence in Medicine

ID: 101087535

From: 1 March 2023 to: 29 February 2028

The main aim of this project is to establish a new research center at the Jagiellonian University (JU) in Kraków (Poland). The center will conduct high quality interdisciplinary research connecting artificial intelligence (AI) with healthcare. This group will build on the...

Coordinated in: Poland

Programme: ERA-Chairs, Widening participation and spreading excellence

Last update: 10 March 2023

Add to my booklet

ARISTOTELES Applying ARtificial Intelligence to Define clinical trajectorieS for personalized predicTiOn and early deTEctiOn of comorbidiTy and muLtimorbidiTy pattErnS

ID: 101080189

From: 1 November 2023 to: 31 October 2028

The ARISTOTELES project aims to build a multinational harmonized data platform to develop and implement novel artificial intelligence (AI) approaches for management of complex diseases, where progression and manifestations of comorbidities are via multiple interacting...

Coordinated in: Italy

Programme: <u>Health</u>, <u>Health throughout the Life Course</u>

Last update: 1 November 2023

Add to my booklet

<u>Periodic Reporting for period 2 - CORESMA (COVID-19-Outbreak Response combining E-health, Serolomics, Modelling, Artificial Intelligence and Implementation Research)</u>

The primary main objective of CORESMA is to generate the most needed clinical and epidemiological data required for defining targeted public health measures at national and global level to become effective during this pandemic. The secondary main objective is to develop and...

Project: <u>CORESMA</u> (ID: 101003480)

Programme: SOCIETAL CHALLENGES - Health, demographic change and well-being

Last update: 27 September 2022

Add to my booklet

<u>Final Report Summary - SMART-HIP (Sensor Based Detection of Implant Loosening in Total Hip Replacements)</u>

Ageing, sedentary behavior, and obesity are predictors of osteoarthritis, a Non Communicable Disease which is the leading cause of disability in the developed world, affecting 9.6% of men and 18% of women aged over 60 years, and among the leading conditions causing work...

Project: SMART-HIP (ID: 606335)

Programme: Specific Programme "Capacities": Research for the benefit of SMEs

Last update: 26 November 2018

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FrailSafe Sensing and predictive treatment of frailty and associated co-morbidities using advanced personalized patient models and advanced interventions

ID: 690140

From: 1 January 2016 to: 30 April 2019

Ageing population is steeply increasing worldwide. A consequence of age related decline is the clinical condition of frailty. Frailty is a biological syndrome of decreased reserve and resistance to stressors, resulting from cumulative declines across multiple physiologic...

Coordinated in: Greece

Programme: SOCIETAL CHALLENGES - Health, demographic change and well-

being, Active ageing and self-management of health

Last update: 8 September 2023

Add to my booklet

<u>Periodic Reporting for period 2 - PERSIST (Patients-centered SurvivorShIp care plan after Cancer treatments based on Big Data and Artificial Intelligence technologies)</u>

Cancer concerns all European citizens. 40% of us are likely to be affected and we all know someone who developed the disease. In 2020, 19.3 million of new cases appeared and there were 9.96 million deathsFor a long time, cancer treatment has been the main focus of research...

Project: PERSIST (ID: 875406)

Programme: SOCIETAL CHALLENGES - Health, demographic change and well-being

Last update: 3 June 2022 Add to my booklet

### Final Report Summary - EU CHIC (European Cultural Heritage Identity Card)

Executive Summary: The primary objective of the "European Cultural Heritage Identity Card" (EU-CHIC) project is to propose a strategy, and systems, for the most efficient methods and tools of harmonising criteria and indicators to track changes and interventions on the...

Project: EU CHIC (ID: 226995)

Programme: Specific Programme "Cooperation": Environment (including Climate Change)

Last update: 1 April 2015 Add to my booklet

### REACH2020 Responsive Engagement of the Elderly promoting Activity and Customized Healthcare

ID: 690425

From: 1 February 2016 to: 31 January 2020

The health expenditure in the EU is expected to rise by 350% by 2050 compared to an economic expansion of only 180% and the provision of Long Term Care (LTC) will pose an increasing challenge to the sustainability of public finances in the EU, due to an ageing population...

Coordinated in: Germany

Programme: SOCIETAL CHALLENGES - Health, demographic change and well-

being, Active ageing and self-management of health

Last update: 17 August 2022

Add to my booklet

### <u>Final Report Summary - FOODINTEGRITY (Ensuring the Integrity of the European food chain)</u>

FoodIntegrity is a 5 year, interdisciplinary project funded under Framework 7, that aimed to assure the integrity of our food. The project comprised 60 participants from EU Member States, China and Argentina. FoodIntegrity was commissioned in 2014 against the background of...

Project: FOODINTEGRITY (ID: 613688)

Programme: Specific Programme "Cooperation": Food, Agriculture and Biotechnology

Last update: 3 July 2019 Add to my booklet

### EHDEN European Health Data and Evidence Network

ID: 806968

From: 1 November 2018 to: 31 October 2024

Europe is generating huge amounts of patient-level information contained in Electronic Health Record (EHR) systems and other types of health databases. These include structured

data in the form of diagnoses, medications, laboratory test results, etc., and unstructured data in...

Coordinated in: Netherlands

Programme: SOCIETAL CHALLENGES - Health, demographic change and well-

being, Innovative Medicines Initiative 2 (IMI2)

Last update: 1 February 2024

Add to my booklet

#### BigData Heart Big Data 4 Better Hearts - Sofia ref.: 116074

ID: 116074

From: 1 March 2017 to: 28 February 2023

Despite remarkable progress in the management of cardiovascular disease (CVD), major unmet needs remain with regard to mortality, hospitalisations, quality of life (QoL), healthcare expenditures and productivity. Acute coronary syndrome (ACS), atrial fibrillation (AF) and...

Coordinated in: Netherlands

Programme: SOCIETAL CHALLENGES - Health, demographic change and well-

being, Innovative Medicines Initiative 2 (IMI2)

Last update: 1 February 2024

Add to my booklet

# AFFECT-EU DIGITAL, RISK-BASED SCREENING FOR ATRIAL FIBRILLATION IN THE EUROPEAN COMMUNITY

ID: 847770

From: 1 January 2020 to: 31 March 2024

Atrial fibrillation (AF) is an increasingly common arrhythmia in the aging European population. Its prevalence will more than double by the year 2050 affecting 5% of EU women and men aged ≥65 years. AF carries a high risk of stroke, heart failure, and dementia, which result...

Coordinated in: Germany

Programme: SOCIETAL CHALLENGES - Health, demographic change and well-

being, Preventing disease

Last update: 12 December 2023

Add to my booklet

### AIDA Artificial Intelligence Data Analysis

ID: 776262

From: 1 September 2018 to: 28 February 2022

AIDA brings a transformational innovation to the analysis of heliophysics data in four steps. First, AIDA will develop a new open source software called AIDApp written in Python (a free language) and capable of collecting, combining and correlating data from different space...

Coordinated in: Belgium

Programme: INDUSTRIAL LEADERSHIP - Leadership in enabling and industrial

<u>technologies – Space, Enabling exploitation of space data</u>

Last update: 23 December 2022

Add to my booklet

#### HBM4EU European Human Biomonitoring Initiative

ID: 733032

From: 1 January 2017 to: 30 June 2022

The overarching goal of the European Human Biomonitoring Initiative (HBM4EU) is to generate knowledge to inform the safe management of chemicals and so protect human health. We will use human biomonitoring to understand human exposure to chemicals and resulting health impacts...

Coordinated in: Germany

Programme: SOCIETAL CHALLENGES - Health, demographic change and well-

being, Preventing disease
Last update: 8 December 2023

Add to my booklet

### <u>Final Report Summary - HERITAGE PLUS (ERA-NET Plus on Cultural Heritage and Global Change Research)</u>

Europe's cultural heritage is the world's most diverse and rich patrimony attracting millions of visitors every year to monuments, historical city centres, archaeological sites and museums. Moreover, heritage is an important component of individual and collective identity...

Project: HERITAGE PLUS (ID: 618104)

Programme: Specific Programme "Cooperation": Environment (including Climate Change)

Last update: 7 June 2019 Add to my booklet

### INTERVENE International consortium for integrative genomics prediction

ID: 101016775

From: 1 January 2021 to: 31 December 2025

The aim of INTERVENE is to develop and test next generation tools for disease prevention, diagnosis, and personalised treatment utilizing the first US-European pool of genomic and health data and integrating longitudinal and disease-relevant -omics data into genetic risk...

Coordinated in: Finland

Programme: SOCIETAL CHALLENGES - Health, demographic change and well-

being, Methods and data

Last update: 28 December 2023

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# <u>Periodic Reporting for period 1 - BRAINTEASER (BRinging Artificial INTelligencE home for a better cAre of amyotrophic lateral sclerosis and multiple SclERosis)</u>

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Project: BRAINTEASER (ID: 101017598)

Programme: SOCIETAL CHALLENGES - Health, demographic change and well-being

Last update: 9 May 2022 Add to my booklet

# Final Report Summary - SODSAT (Remote precision management of turf grass sod production by means of artificial intelligence and satellite imaging)

Sod or Turf Grass as it is more commonly known, is used extensively in sports and landscaping projects. Although natural sod has been replaced with synthetic turf in some

cases, turf grass still is still the choice for many sports and landscaping projects. Just like

any...

Project: SODSAT (ID: 605729)

Programme: Specific Programme "Capacities": Research for the benefit of SMEs

Last update: 12 August 2016

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### RADAR-CNS Remote Assessment of Disease and Relapse in Central Nervous System

Disorders
ID: 115902

From: 1 April 2016 to: 31 March 2022

Background: Long term conditions require monitoring of patients, traditionally conducted in the clinic, to monitor treatment effects, adverse events and disease course. This can be inefficient and cumbersome – clinic visits may be too infrequent to identify individuals at...

Coordinated in: United Kingdom

Programme: SOCIETAL CHALLENGES - Health, demographic change and well-

being, Innovative Medicines Initiative 2 (IMI2)

Last update: 2 February 2024

Add to my booklet

# INTENT Intelligent Instruments: Understanding 21st-Century AI Through Creative Music Technologies

ID: 101001848

From: 1 September 2021 to: 31 August 2026

Artificial Intelligence is becoming increasingly human-like and it is now proficient in a key human activity: musical creativity. But what does this mean? How does creative AI change our notions of art, culture and society? As new machine learning technologies begin to mirror...

Coordinated in: Iceland

Programme: EXCELLENT SCIENCE - European Research Council (ERC)

Last update: 19 August 2022

Add to my booklet

# IM-TWIN from Intrinsic Motivations to Transitional Wearable INtelligent companions for autism spectrum disorder

ID: 952095

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Coordinated in: Italy

Programme: EXCELLENT SCIENCE - Future and Emerging Technologies (FET), FET

**Proactive** 

Last update: 26 February 2023

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Breast cancer: EU funding for new tools and solutions

Breast cancer claims the lives of more European women than any other cancer: one in eight women in the EU will develop breast cancer before the age of 85. Data from the European Cancer Information System (ECIS) indicate more than 400 000 new cases were diagnosed in 2018. By improving the quality of breast cancer services in Europe, the European Commission Initiative on Breast Cancer (ECIBC) aims to help reduce the burden of cancer and decrease the avoidable differences in breast cancer incidence, prevalence, mortality and survival.

Available languages: DEENESFRITPL

Last update: 18 September 2019

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ID: 101117469

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Coordinated in: Spain

Programme: European Research Council (ERC)

Last update: 26 December 2023

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WellCo delivers a radical new ICT-based solution in the provision of personalised advice, guidance and follow-up of users for the adoption of healthier behaviour choices that help them to maintain or improve their physical cognitive, mental and social well-being for as long as...

Coordinated in: Spain

Programme: SOCIETAL CHALLENGES - Health, demographic change and well-

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Last update: 22 August 2022

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### HeartMan Personal Decision Support System For Heart Failure Management

ID: 689660

From: 1 January 2016 to: 30 April 2019

1–2% of the developed world suffers from congestive heart failure (CHF), which is the most frequent cause of hospitalization in people aged over 65. CHF management involves medications, monitoring of fluid intake and weight, exercise and lifestyle modifications. Since most...

Coordinated in: Slovenia

Programme: SOCIETAL CHALLENGES - Health, demographic change and well-

being, Active ageing and self-management of health

Last update: 15 August 2022

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iHELP Personalised Health Monitoring and Decision Support Based on Artificial Intelligence and Holistic Health Records

ID: 101017441

From: 1 January 2021 to: 30 June 2024

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The specific focus of iHELP is on early identification and mitigation of the risks associated with Pancreatic Cancer based on the application of advance AI-based learning and decision support techniques on the historic (primary) data of Cancer patients gathered from...

Coordinated in: Greece

Programme: <u>SOCIETAL CHALLENGES</u> - <u>Health</u>, <u>demographic change and wellbeing</u>, <u>Individual awareness and empowerment for self-management of health</u>

Last update: 24 January 2024

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### RADAR-CNS Remote Assessment of Disease and Relapse in Central Nervous System

Disorders
ID: 115902

From: 1 April 2016 to: 31 March 2022

Background: Long term conditions require monitoring of patients, traditionally conducted in the clinic, to monitor treatment effects, adverse events and disease course. This can be inefficient and cumbersome – clinic visits may be too infrequent to identify individuals at...

Coordinated in: United Kingdom

Programme: SOCIETAL CHALLENGES - Health, demographic change and well-

being, Innovative Medicines Initiative 2 (IMI2)

Last update: 2 February 2024

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SVDs-at-target Small vessel diseases in a mechanistic perspective: Targets for Intervention Affected pathways and mechanistic exploitation for prevention of stroke and dementia

ID: 666881

From: 1 January 2016 to: 31 December 2021

Stroke and dementia rank among the most pressing health issues in Europe. Cerebral small vessel diseases (SVDs) have emerged as a central link between these two major comorbidities. SVDs account for more than 30% of strokes and at least 40% of dementia cases. They encounter...

C 1: 4 1: C

Coordinated in: Germany

Programme: SOCIETAL CHALLENGES - Health, demographic change and well-

being, Understanding health, wellbeing and disease

Last update: 22 January 2023

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# <u>DIGI-B-CUBE Digital Enterprise Innovations for Bioimaging, Biosensing and Biobanking Industries</u>

ID: 824920

From: 1 May 2019 to: 30 April 2022

DIGI-B-CUBE project aims to unlock the cross-sectoral collaborative potential of SMEs by combining Artificial Intelligence (AI), Cognitive Computing Digital Technologies (CCDT) with the Bioimaging-Biosensing-Biobanking (B-CUBE) and realted industries to deliver market...

Coordinated in: Norway

Programme: INDUSTRIAL LEADERSHIP - Innovation In SMEs, Enhancing the innovation

capacity of SMEs

Last update: 29 August 2023

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REPORT SUMMARY

### PREPARE PERSONALIZED REHABILITATION VIA NOVEL AI PATIENT STRATIFICATION STRATEGIES

ID: 101080288

From: 1 June 2023 to: 31 May 2027

PREPARE aims at advancing rehabilitation care for patients with chronic non-communicable diseases. As rehabilitation is a complex, multifaceted, and highly personal process, we currently lack reliable patient stratification and outcome prediction tools. While big data...

Coordinated in: Greece

Programme: Health, Tools, Technologies and Digital Solutions for Health and Care, including

personalised medicine

Last update: 29 August 2023

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## <u>Final Report Summary - ERRIC (Empowering Romanian Research on Intelligent Information Technologies)</u>

The Faculty of Automatic Control and Computers (A&C) at the University "Politehnica" of Bucharest is already well known as both a national and regional centre of excellence in Intelligent Information Technologies. The main goal of the ERRIC project was to...

Project: ERRIC (ID: 264207)

Programme: Specific Programme "Capacities": Research potential of Convergence Regions

Last update: 7 May 2015 Add to my booklet

# <u>Periodic Reporting for period 2 - LIVE INCITE (Lifestyle intervention in the perioperative process through digital service)</u>

It is well known that health care outcomes in the perioperative care process correlate with severity of disease, operational procedure and co-morbidity as well as reduced effects of rehabilitation. Only recently, it has been proved that also the lifestyle factors of the...

Project: LIVE INCITE (ID: 727558)

Programme: SOCIETAL CHALLENGES - Health, demographic change and well-being

Last update: 8 April 2022 Add to my booklet

### RELIEVE First Closed-loop non-Invasive Seizure Prevention System

ID: 101099481

From: 1 April 2023 to: 31 March 2026

The goal of Project RELIEVE is to build the very first non-invasive effective closed-loop monitoring and intervention system for brain-related disorders. The outcomes can be used to treat or manage various psychiatric and neurological disorders. We do this by pushing the...

Coordinated in: Czechia

Programme: The European Innovation Council (EIC)

Last update: 24 February 2023

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### Reducing the risk of surgical error

New technology aims to reduce the risk of surgical error by using a combination of artificial intelligence and intraoperative neuromonitoring systems.

Project: BESAFE (ID: 847378)

Available languages:

**DEENESFRITPL** 

Last update: 5 October 2020

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#### AMPLify Allocation Made PracticaL

ID: 670077

From: 1 June 2016 to: 31 May 2021

Allocation Made Practical The AMPLify project will lay the foundations of a new field, computational behavioural game theory that brings a computational perspective, computational implementation, and behavioural insights to game theory. These foundations will be laid by...

Coordinated in: Germany

Programme: EXCELLENT SCIENCE - European Research Council (ERC)

Last update: 23 July 2023 Add to my booklet

### COVIRNA A diagnostic test to improve surveillance and care of COVID-19 patients

ID: 101016072

From: 1 November 2020 to: 30 April 2023

Coronavirus disease 2019 (COVID-19) caused by infection with SARS coronavirus 2 (SARS-CoV-2) has reached pandemic proportions with more than 7 million people infected and 0.4 million people killed worldwide. Death rates are accentuated by cardiovascular comorbidities and

Coordinated in: Luxembourg

Programme: SOCIETAL CHALLENGES - Health, demographic change and well-being

Last update: 28 December 2023

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# TOXI-triage INTEGRATED AND ADAPTIVE RESPONSES TO TOXIC EMERGENCIES FOR RAPID TRIAGE: ENGINEERING THE ROADMAP FROM CASUALTY TO PATIENT TO SURVIVOR.

ID: 653409

From: 1 September 2015 to: 30 September 2019

The seven specific objectives of TOXI-triage address the operational; technological; ethical and societal dimensions of CBRN response and recovery, and importantly the economic base from which sustainable CBRN and multi-use systems are derived.19 partners in 4 Task forces will...

Coordinated in: United Kingdom

Programme: Secure societies - Protecting freedom and security of Europe and its citizens

Last update: 23 August 2022

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### <u>HIPPOCRATES Health Initiatives in Psoriasis and PsOriatic arthritis ConsoRTium European</u> States

ID: 101007757

From: 1 July 2021 to: 30 June 2026

Psoriatic Arthritis (PsA) is a clinically heterogeneous disease associated with diminished quality of life. Early diagnosis is challenging and prediction of natural history or therapeutic response to treatment is suboptimal: these represent critical, contemporary unmet...

Coordinated in: Ireland

Programme: SOCIETAL CHALLENGES - Health, demographic change and well-

being, Innovative Medicines Initiative 2 (IMI2)

Last update: 28 December 2023

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EUCAN-Connect A federated FAIR platform enabling large-scale analysis of high-value cohort data connecting Europe and Canada in personalized health

ID: 824989

From: 1 January 2019 to: 31 December 2023

Rapid progress in information and biotechnologies offers the promise of better, personalized health strategies using rich phenotypic, environmental and molecular (omics) profiles of every individual. To capitalize on this great promise, key challenge is to relate these...

Coordinated in: Netherlands

Programme: SOCIETAL CHALLENGES - Health, demographic change and well-

being, Methods and data Last update: 1 February 2024

Add to my booklet

### TeNDER affecTive basEd iNtegrateD carE for betteR Quality of Life

ID: 875325

From: 1 November 2019 to: 30 April 2023

With an increasingly growing population in Europe, cognitive impairments as well as heart diseases are a major social and health issue. 1.2 million people in Europe are affected by Parkinson's disease (PD) while Alzheimer's disease remains one of the biggest global public...

Coordinated in: Spain

Programme: SOCIETAL CHALLENGES - Health, demographic change and well-being, Active ageing, independent and assisted living, Optimising the efficiency and effectiveness of healthcare provision and reducing inequalities by evidence based decision making and dissemination of best practice, and innovative technologies and approaches

Last update: 18 December 2023

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#### Predicting the aesthetic outcome of breast cancer surgery

Project: CINDERELLA (ID: 101057389)

Programme: <u>Health</u> Available languages: DEENESFRITPL

Last update: 30 January 2023

<u>Final Report Summary - BIOSCENT (BIOactive highly porous and injectable Scaffolds controlling stem cell recruitment, proliferation and differentiation and enabling angiogenesis for Cardiovascular Engineered Tissues)</u>

Congenital and acquired diseases of the heart, such as heart valve deterioration, large artery dysfunction and coronary artery blockage, are the leading causes of morbidity and mortality in Europe today, being the first cause of death in people above 60 years...

Project: **BIOSCENT** (ID: 214539)

Programme: Specific Programme "Cooperation": Nanosciences, Nanotechnologies, Materials

and new Production Technologies
Last update: 20 January 2015

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### The intrauterine link between maternal and child obesity

A better understanding of the link between maternal and offspring obesity could lead to more accurate and earlier identification of the women and infants most at risk, leading to tailored antenatal care.

Project: ObesityDevelop (ID: 669545)

Available languages: DEENESFRITPL

Last update: 22 February 2022

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# Final Report Summary - EURIPIDES (European research initiative to develop imaging probes for early in-vivo diagnosis and evaluation of response to therapeutic substances)

Executive summary: Drug resistance is an important clinical problem. Globally, 50,000,000 people have epilepsy: current treatments are ineffective in 30%. Drug resistance is associated with higher rates of: unemployment, disadvantage, injury, somatic co-morbidity (affecting m...

Project: EURIPIDES (ID: 201380)

Programme: Specific Programme "Cooperation": Health

Last update: 1 July 2013 Add to my booklet

### Periodic Reporting for period 2 - BigMedilytics (Big Data for Medical Analytics)

The healthcare sector currently accounts for 10% of the EU's GDP. To improve productivity of the healthcare sector, it is necessary to reduce cost while maintaining or improving the quality of care. The most effective way to achieve this, is to use the knowledge that is...

Project: BigMedilytics (ID: 780495)

Programme: INDUSTRIAL LEADERSHIP - Leadership in enabling and industrial

technologies - Information and Communication Technologies (ICT)

Last update: 22 November 2022

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sustAGE Smart environments for person-centered sustainable work and well-being WISDOM Well-being improvement through the Integration of healthcare and reSearch Data and models with Out border for chronic iMmune-mediated diseases

ID: 101137154

From: 1 December 2023 to: 30 November 2028

Enabling integration of medical and research data, secure data sharing and leveraging responsible state-of-the-art artificial intelligence (AI)-mediated models opens immense possibilities to mitigate the impact of chronic immune-mediated diseases (CIMDs) affecting 10% of...

Coordinated in: Sweden

Programme: Health, Tools, Technologies and Digital Solutions for Health and Care, including

personalised medicine

Last update: 18 January 2024

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### Periodic Reporting for period 1 - BRAINTEASER (BRinging Artificial INTelligencE home for a better cAre of amyotrophic lateral sclerosis and multiple SclERosis)

BRAINTEASER is a 48 months project that started on January 1st 2021, co-funded by the European Union's Horizon 2020 research (grant agreement No 101017598) under the domain of the Health, demographic change and well-being. The BRAINTEASER Project driven by 11 partners from 6...

Project: **BRAINTEASER** (ID: 101017598)

Programme: SOCIETAL CHALLENGES - Health, demographic change and well-being

Last update: 9 May 2022 Add to my booklet

### Periodic Reporting for period 1 - CANCER-RADIOMICS (Deep Learning for Automated Quantification of Radiographic Tumor Phenotypes)

What is the problem being addressed? One important reason for the slow progress in the fight against cancer, is the fact that cancer is a "moving target". It is constantly evolving and diversifying, changing its phenotype, its genomic composition, and through metastatic...

Project: CANCER-RADIOMICS (ID: 866504)

Programme: EXCELLENT SCIENCE - European Research Council (ERC)

Last update: 29 April 2022 Add to my booklet

### AI for safer clinical decision-making in rehabilitation

• Project: <u>AISN</u> (ID: 101057655)

• Programme: Health • Available languages: DEENESFRITPL

Last update: 24 April 2023

### Periodic Reporting for period 3 - FeatureCloud (Privacy preserving federated machine learning and blockchaining for reduced cyber risks in a world of distributed healthcare)

- The digital revolution, in particular big data and artificial intelligence (AI), offers new opportunities to transform healthcare. However, it also harbours risks to the safety of sensitive clinical data stored in critical healthcare information and communication...
- Project: FeatureCloud (ID: 826078)
- Programme: SOCIETAL CHALLENGES Health, demographic change and well-
- Last update: 28 November 2022
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### AI-PATH Artificial intelligence expert to boost growth of a high-potential digital diagnostics start-up

- ID: 957075
- From: 1 October 2020 to: 31 January 2022
- Ellogon AI is an innovative start-up established in 2019 as a spin-off from University of Amsterdam, by leading academic experts in artificial intelligence, medical imaging,

and computational pathology. The company develops a unique approach to analysis of complex...

• Coordinated in: Netherlands

- Programme: <u>INDUSTRIAL LEADERSHIP</u> <u>Innovation In SMEs</u>, <u>Enhancing the innovation capacity of SMEs</u>
- Last update: 27 December 2023

• Add to my booklet

Last update Title

### COVID-X COVID eXponential Programme

ID: 101016065

From: 1 November 2020 to: 31 October 2022

COVID-X will bridge the collaboration divide between eHealth solution providers -with emphasis on lean startups and small and medium-sized enterprises (SMEs)-, and the healthcare professional system to fight COVID-19. The purpose is to boost an end-to-end agile validation...

Coordinated in: Ireland

Programme: SOCIETAL CHALLENGES - Health, demographic change and well-being

Last update: 13 June 2023

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PROJECT

WISDOM Well-being improvement through the Integration of healthcare and reSearch Data and models with Out border for chronic iMmune-mediated diseases

ID: 101137154

From: 1 December 2023 to: 30 November 2028

Enabling integration of medical and research data, secure data sharing and leveraging responsible state-of-the-art artificial intelligence (AI)-mediated models opens immense possibilities to mitigate the impact of chronic immune-mediated diseases (CIMDs) affecting 10% of...

Coordinated in: Sweden

Programme: Health, Tools, Technologies and Digital Solutions for Health and Care, including

personalised medicine

Last update: 18 January 2024

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### PHIRE Photoacoustic imaging and artificial intelligence-based theranostic approach for cancer

ID: 101113193

From: 1 September 2023 to: 31 August 2026

"Health programs crave for diagnostic imaging and eradication of chemoresistant neoplastic lesions smaller than 1 mm of size. PHIRE, based on the outcomes from EDIT (FET-OPEN-RIA, GA#801126), aims at bringing closer to market a novel high-resolution theranostic medical device...

Coordinated in: Italy

Programme: The European Innovation Council (EIC)

Last update: 11 July 2023 Add to my booklet PROJECT

# BAHCI Bringing a health claim to information: Measuring the impact of health data on the health outcomes of European citizens

ID: 795051

From: 1 August 2018 to: 31 July 2020

European Union Members States (EU-MS) share similar levels of development and access to care. Yet, key population health indicators vary widely across countries. The societal burden of these inequalities is high, and leveraging evidence to achieve better health outcomes is a...

Coordinated in: Belgium

Programme: EXCELLENT SCIENCE - Marie Skłodowska-Curie Actions, Nurturing

excellence by means of cross-border and cross-sector mobility

Last update: 17 August 2022

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#### FORGETDIABETES A BIONIC INVISIBLE PANCREAS TO FORGET DIABETES

ID: 951933

From: 1 October 2020 to: 31 March 2025

FORGETDIABETES introduces a radically new approach to Type 1 Diabetes (T1D) treatment, by developing an immuno-optimized, fully-implantable, fully-automated, Bionic Invisible Pancreas (BIP). BIP targets physiological intraperitoneal hormone delivery, enabling an optimal...

Coordinated in: Italy

Programme: EXCELLENT SCIENCE - Future and Emerging Technologies (FET), FET

**Proactive** 

Last update: 28 December 2022

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### 4D PICTURE Design-based Data-Driven Decision-support Tools: Producing Improved Cancer Outcomes Through User-Centred Research

ID: 101057332

From: 1 October 2022 to: 30 September 2027

Patients with cancer often have to make complex decisions about treatment, with the options varying in risk profiles and effects on survival and quality of life. Data-driven decision-support tools (DSTs) have the potential to empower patients, support personalized care...

Coordinated in: Netherlands

Programme: Health, Health Care Systems

Last update: 29 July 2022 Add to my booklet

# SLEEP REVOLUTION Revolution of sleep diagnostics and personalized health care based on digital diagnostics and therapeutics with health data integration

ID: 965417

From: 1 March 2021 to: 28 February 2025

Obstructive sleep apnea (OSA) is associated with various negative health consequences including increased risk of heart disease, hypertension and daytime sleepiness causing road accidents. The economic burden of OSA is rising as almost 1 billion people worldwide are estimated...

Coordinated in: Iceland

Programme: SOCIETAL CHALLENGES - Health, demographic change and well-

being, Methods and data

Last update: 2 January 2024

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#### ERIN Ethically Responsible INnovations in reproductive medicine

ID: 952516

From: 1 September 2020 to: 31 December 2023

ERIN project was initiated to spread the academic excellence to University of Tartu (UT) in Estonia as representative of the Widening country, by enhancing networking activities with internationally-leading counterparts, Karolinska Institute (Sweden) and Maastricht

University...

Coordinated in: Estonia

Programme: Twinning of research institutions

Last update: 27 December 2023

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# TOXI-triage INTEGRATED AND ADAPTIVE RESPONSES TO TOXIC EMERGENCIES FOR RAPID TRIAGE: ENGINEERING THE ROADMAP FROM CASUALTY TO PATIENT TO SURVIVOR.

ID: 653409

From: 1 September 2015 to: 30 September 2019

The seven specific objectives of TOXI-triage address the operational; technological; ethical and societal dimensions of CBRN response and recovery, and importantly the economic base from which sustainable CBRN and multi-use systems are derived.19 partners in 4 Task forces will

Coordinated in: United Kingdom

Programme: Secure societies - Protecting freedom and security of Europe and its citizens

Last update: 23 August 2022

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# <u>DIGIPARENT DIGIPARENT - Implementation</u>, personalization and genetics of digitally assisted parent training intervention to improve child mental health services.

ID: 101020767

From: 1 November 2021 to: 31 October 2026

Childhood disruptive behavior problems pose huge challenge to societies given the high lifetime burden and costs associated. Mounting evidence shows that parent training is the most effective psychosocial treatment for these problems. However, most parents in need of such...

Coordinated in: Finland

Programme: EXCELLENT SCIENCE - European Research Council (ERC)

Last update: 25 May 2022

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# PRE-IMAGE Pre-transplant Renal Ex vivo Imaging and Multi-omics for Advanced Graft Evaluation

ID: 851368

From: 1 November 2020 to: 31 October 2025

There is a considerable shortage of deceased donor kidneys. Hence, more organs of marginal quality need to be considered for transplantation. Transplant centers are increasingly utilizing ex vivo normothermic machine perfusion to better preserve donor kidneys prior to...

Coordinated in: Netherlands

Programme: EXCELLENT SCIENCE - European Research Council (ERC)

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<u>InstrAct From instructions to actions: characterizing the spatiotemporal neural signatures of instructions following.</u>

ID: 835767

From: 1 January 2020 to: 31 December 2021

From air traffic control to large surgery teams, some of the most advanced human collaborative achievements largely rely on our ability to successfully give and follow instructions. Given the combination of novelty, speed, complexity and efficiency, significant effort has been...

Coordinated in: Belgium

Programme: EXCELLENT SCIENCE - Marie Skłodowska-Curie Actions, Nurturing

excellence by means of cross-border and cross-sector mobility

Last update: 24 July 2023 Add to my booklet

dAIbetes Federated virtual twins for privacy-preserving personalised outcome prediction of type 2 diabetes treatment

ID: 101136305

From: 1 January 2024 to: 31 December 2028

Virtual twins may be used as prognostic tools in precision medicine for personalised disease management. However, their training is a data hungry endeavour requiring big data to be integrated across diverse sources, which in turn is hampered by privacy legislation such as the...

Coordinated in: Germany

Programme: <u>Health</u>, <u>Tools</u>, <u>Technologies and Digital Solutions for Health and Care, including</u>

personalised medicine
Last update: 8 January 2024

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eCAP eCAP - Ehealth CAPsule for digestive disease diagnostics and therapy

ID: 101057525

From: 1 May 2022 to: 30 April 2026

eCAP aims to deliver a novel medical device which combines a smart capsule with an ehealth platform for better diagnostics, patient empowered disease management and hence, improved outcomes for patients with gastrointestinal (GI) diseases. Our project will create a modular...

Coordinated in: France

Programme: Health, Tools, Technologies and Digital Solutions for Health and Care, including

personalised medicine
Last update: 29 July 2022
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PrECISE PERSONALIZED ENGINE FOR CANCER INTEGRATIVE STUDY AND EVALUATION

ID: 668858

From: 1 January 2016 to: 31 December 2018

Despite of their great promise, high-throughput technologies in cancer research have often failed to translate to major therapeutic advances in the clinic. One challenge has been tumour heterogeneity, where multiple competing subclones coexist within a single tumour.

Genomic...

Coordinated in: Austria

Programme: SOCIETAL CHALLENGES - Health, demographic change and well-

being, Understanding health, wellbeing and disease

Last update: 15 August 2022

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MES-CoBraD Multidisciplinary Expert System for the Assessment & Management of Complex Brain Disorders

ID: 965422

From: 1 April 2021 to: 30 September 2024

The Multidisciplinary Expert System for the Assessment & Management of Complex Brain Disorders (MES-CoBraD) is an interdisciplinary project combining Real-World Data (RWD) from multiple clinical and consumer sources through comprehensive, cost-efficient, and fast protocols...

Coordinated in: Greece

Programme: SOCIETAL CHALLENGES - Health, demographic change and well-

being, Methods and data Last update: 2 January 2024

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<u>Homi-lung Long-term alterations of host-microbiome interactions and cardiovascular and respiratory diseases progression after pneumonia</u>

ID: 101137148

From: 1 January 2024 to: 31 December 2028

Challenges. The incidence of cardiovascular diseases (CVD) increases after infections, but causal mechanisms are not understood yet. Pneumonia, which can be acquired in the community (such as flu and COVID-19) or during hospitalization, is a leading cause of infectious...

Coordinated in: France

Programme: <u>Health</u>, <u>Non-Communicable and Rare Diseases</u>, <u>Infectious Diseases</u>, <u>including</u> poverty-related and neglected diseases

Last update: 17 January 2024

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STOP STop Obesity Platform

ID: 823978

From: 1 March 2019 to: 28 February 2023

The STOP project will bring together an interdisciplinary and intersectoral group of subject matter experts from industry and academia under one umbrella, to address the health societal challenge of obesity with the specific objectives of mitigating the enormous and growing...

Coordinated in: Germany

Programme: EXCELLENT SCIENCE - Marie Skłodowska-Curie Actions, Stimulating innovation by means of cross-fertilisation of knowledge

Last update: 6 February 2024

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#### PANCAIM Pancreatic cancer AI for genomics and personalized Medicine

ID: 101016851

From: 1 January 2021 to: 31 December 2024

The central PANCAIM concept is to successfully exploit available genomic and clinical data to improve personalized medicine of pancreatic cancer. PANCAIM's concept is unique as it integrates the whole spectrum of genomics with radiomics and pathomics, the three future...

Coordinated in: Netherlands

Programme: SOCIETAL CHALLENGES - Health, demographic change and well-

being, Methods and data

Last update: 28 December 2023

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# TAXINOMISIS A multidisciplinary approach for the stratification of patients with carotid artery disease

ID: 755320

From: 1 January 2018 to: 31 December 2023

Carotid artery disease, the primary trigger of ischaemic cerebrovascular events including stroke, causes major morbidity, mortality and healthcare costs worldwide. Still, treatment is based on criteria established in the 90s that do not take into account the molecular...

Coordinated in: Greece

Programme: SOCIETAL CHALLENGES - Health, demographic change and well-

being, Understanding health, wellbeing and disease

Last update: 1 February 2024

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### <u>CARE-KNEEOA In Silico Clinically-Viable Assistive Tools for Prediction and Rehabilitation</u> of Knee Osteoarthritis

ID: 101108335

From: 1 September 2024 to: 31 August 2027

Knee osteoarthritis (KOA) is a leading cause of disability worldwide, with ~14% prevalence in Europeans aged over 40. KOA prevalence continues to rise, thus far, with no cure or proven prevention protocols. Nonetheless, an aberrant knee mechanobiological environment is known...

Coordinated in: Finland

Programme: Marie Skłodowska-Curie Actions (MSCA)

Last update: 8 December 2023

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#### INDIGO Innovative Training & Decision Support for Emergency operations

ID: 242341

From: 1 May 2010 to: 30 April 2013

The INDIGO project aims to research, develop and validate an innovative system integrating the latest advances in Virtual Reality, Simulation and Artificial Intelligence in order to homogenise and enhance both the operational preparedness and the management of an actual compl...

Coordinated in: France

Programme: Specific Programme "Cooperation": Security

Last update: 16 July 2019 Add to my booklet

#### **RE-SAMPLE RE-SAMPLE**

ID: 965315

From: 1 March 2021 to: 28 February 2025

Multi-morbid complex chronic conditions (CCCs) are highly prevalent in patients with Chronic Obstructive Pulmonary Disease (COPD). As they have common risk factors and overlapping symptoms, this easily leads to delay of appropriate treatment. Timely and preventive care is...

Coordinated in: Netherlands

Programme: SOCIETAL CHALLENGES - Health, demographic change and well-

being, Methods and data

Last update: 27 December 2023

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### IMPACT Cardiogenomics meets Artificial Intelligence: a step forward in arrhythmogenic cardiomyopathy diagnosis and treatment

ID: 101115536

From: 1 October 2023 to: 30 September 2026

Arrhythmogenic cardiomyopathy (ACM) is a genetic disease characterized by progressive cardiomyocyte loss and fibrofatty replacement, which in turn lead to the occurrence of ventricular arrhythmias and sudden cardiac death (SCD), particularly in the young and athletes. At...

Coordinated in: Italy

Programme: The European Innovation Council (EIC)

Last update: 28 June 2023 Add to my booklet

#### SynaNet Neurologic and Psychiatric Disorders: from synapses to networks

ID: 692340

From: 1 January 2016 to: 31 December 2018

Neurologic and Psychiatric Disorders: from synapses to networks (SynaNet) aims to promote collaborative multidisciplinary and translational research by enhancing effective knowledge transfer, exchange of best research practices, and the mobility of early stage researchers...

Coordinated in: Portugal

Programme: Twinning of research institutions

Last update: 11 September 2023

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REALMENT Using real-world big data from eHealth, biobanks and national registries, integrated with clinical trial data to improve outcome of severe mental disorders

ID: 964874

From: 1 June 2021 to: 31 May 2025

Mental disorders represent one of the largest burdens for the European Health Care system, due to large number of patients and a lack of efficient treatment options. Today, drug treatment of mental disorders is characterized by severe adverse effects and suboptimal response in...

Coordinated in: Norway

Programme: SOCIETAL CHALLENGES - Health, demographic change and well-

being, Methods and data

Last update: 27 December 2023

Add to my booklet

BornToGetThere Implementation of early detection and early intervention service delivery in infants at risk for cerebral palsy to promote infants' psychomotor development and maternal health

ID: 848201

From: 1 January 2020 to: 31 December 2024

Despite advances in the medical management of high-risk pregnancies and deliveries, cerebral palsy (CP) remains the most common physical disability in childhood in high and low-to-middle income (LMIC). In addition, caregivers of children with CP are at higher risk of...

Coordinated in: Italy

Programme: SOCIETAL CHALLENGES - Health, demographic change and well-

being, Health care provision and integrated care

Last update: 12 December 2023

Add to my booklet

<u>i-PROGNOSIS Intelligent Parkinson eaRly detectiOn Guiding NOvel Supportive</u> InterventionS

ID: 690494

From: 1 February 2016 to: 31 January 2020

Transition from healthy status to Parkinson's Disease (PD) is vaguely tractable, since symptoms can be so subtle in the early stages that they go unnoticed. Lack of biomarkers and/or findings on routine MRI and CT scans, PD is left undiagnosed for years, gradually affecting...

Coordinated in: Greece

Programme: SOCIETAL CHALLENGES - Health, demographic change and well-

being, Active ageing and self-management of health

Last update: 7 September 2023

Add to my booklet

<u>RADAR-AD</u> Remote Assessment of Disease and Relapse – Alzheimer's Disease

ID: 806999

From: 1 January 2019 to: 30 June 2023

There is an urgent need for novel approaches assessing functional decline in early AD. The main goal of the RADAR-AD project is to develop a digital platform to detect subtle functional deficits in early Alzheimer's disease (AD) individuals by integrating a meaningful...

Coordinated in: United Kingdom

Programme: SOCIETAL CHALLENGES - Health, demographic change and well-

being, Innovative Medicines Initiative 2 (IMI2)

Last update: 28 December 2023

#### Add to my booklet

### CONTROL-MYOPIA Myopia control in the real world: treatments, target, timing, and terminus

ID: 101098324

From: 1 October 2023 to: 30 September 2028

Background: Myopia, or near-sightedness, is increasing dramatically all over the world, mostly due to higher levels of education and changing lifestyles of young generations. The expectation is that half of the world's citizens will be myopic by 2050. Myopia-related...

Coordinated in: Netherlands

Programme: European Research Council (ERC)

Last update: 4 October 2023

Add to my booklet

### IM-TWIN from Intrinsic Motivations to Transitional Wearable INtelligent companions for autism spectrum disorder

ID: 952095

From: 1 November 2020 to: 31 October 2023

The IM-TWIN project aims to develop some of the outcomes of the FET GOAL-Robots project towards market exploitation. The basic-research FET GOAL-Robots project aimed to study how intrinsic motivations ("curiosity") drive exploration and learning in children, and how such...

Coordinated in: Italy

Programme: EXCELLENT SCIENCE - Future and Emerging Technologies (FET), FET

Proactive

Last update: 26 February 2023

Add to my booklet

#### ProACT Integrated Technology Ecosystem for ProACTive Patient Centred Care

ID: 689996

From: 1 January 2016 to: 31 August 2019

ProACT targets Europe's 50 million multimorbid patients to proactively self-manage and offset the EU's annual €700billion cost of chronic disease management. ProACT aims at providing and evaluating an open application programming interface to integrate a variety of new...

Coordinated in: Ireland

Programme: SOCIETAL CHALLENGES - Health, demographic change and well-

being, Health care provision and integrated care

Last update: 17 August 2022

Add to my booklet

#### PD manager mhealth platform for Parkinson's disease management

ID: 643706

From: 1 January 2015 to: 31 March 2018

PD\_manager aims to build and evaluate an innovative, mhealth, patient centric ecosystem for Parkinson's disease (PD) management. The analysis of experts' diagnostic behaviour and the decomposition of tasks undertaken by the various actors during the disease management will...

Coordinated in: Slovenia

Programme: SOCIETAL CHALLENGES - Health, demographic change and well-

being, Active ageing and self-management of health

Last update: 17 August 2022

Add to my booklet

#### CORE-MD Coordinating Research and Evidence for Medical Devices

ID: 965246

From: 1 April 2021 to: 31 March 2024

CORE–MD will translate expert scientific and clinical evidence on study designs for evaluating high-risk medical devices into advice for EU regulators, to achieve an appropriate balance between innovation, safety, and effectiveness. A unique collaboration between medical...

Coordinated in: France

Programme: SOCIETAL CHALLENGES - Health, demographic change and well-

being, Methods and data

Last update: 28 December 2023

Add to my booklet

# SEURO Scaling EUROpean citizen driven transferable and transformative digital integrated health and social care

ID: 945449

From: 3 May 2021 to: 2 May 2024

SEURO targets Europe's 50 million multimorbid patients to proactively self-manage and offset the EU's annual €700 billion cost of chronic disease management. SEURO aims to evaluate key factors to prepare organisations, localities and regions across the EU to scale...

Coordinated in: Ireland

Programme: SOCIETAL CHALLENGES - Health, demographic change and well-

being, Methods and data

Last update: 27 December 2023

Add to my booklet

#### BETTER Better rEal-world healTh-daTa distributEd analytics Research platform

ID: 101136262

From: 1 December 2023 to: 31 May 2027

In recent years, data-driven medicine has gained increasing importance in terms of diagnosis, treatment, and research due to the exponential growth of healthcare data. The linkage of cross-border health data from various sources, including genomics, and analysis via innovative...

Coordinated in: Italy

Programme: <u>Health</u>, <u>Tools</u>, <u>Technologies and Digital Solutions for Health and Care, including</u>

personalised medicine

Last update: 14 November 2023

Add to my booklet

### STAMINA Demonstration of intelligent decision support for pandemic crisis prediction and management within and across European borders

ID: 883441

From: 1 September 2020 to: 28 February 2023

STAMINA develops an intelligent decision support toolset for pandemic prediction and management and demonstrates its use by practitioners at national and regional levels within

and across EU borders. The STAMINA toolset enables national planners and first responders

to...

Coordinated in: Greece

Programme: Secure societies - Protecting freedom and security of Europe and its

citizens, Increase Europe's resilience to crises and disasters

Last update: 19 December 2023

Add to my booklet

#### MLFPM2018 Machine Learning Frontiers in Precision Medicine

ID: 813533

From: 1 January 2019 to: 31 March 2024

Healthcare is entering the digital era: More and more patient data, from the molecular level of genome sequences to the level of image phenotypes and health history, are available in digital form. Exploring this big health data promises to reveal new insights into disease...

Coordinated in: Switzerland

Programme: EXCELLENT SCIENCE - Marie Skłodowska-Curie Actions, Fostering new

skills by means of excellent initial training of researchers

Last update: 13 June 2023 Add to my booklet

### BD2Decide Big Data and models for personalized Head and Neck Cancer Decision support

ID: 689715

From: 1 January 2016 to: 30 September 2019

"Cancers of the Head and Neck Region (HNC) are the 6th more deadly cancers worldwide: in Europe ~150.000 new cases are detected and ~70.000 patients die every year. The main reasons for high mortality are the fact that the majority of cases are diagnosed in advanced Stage and...

Coordinated in: Italy

Programme: SOCIETAL CHALLENGES - Health, demographic change and well-

being, Methods and data Last update: 15 August 2022

Add to my booklet

#### AI CUrES AI to predict Cancer metastasis using Ultra-Echo-Sono imaging

ID: 101081529

From: 1 November 2022 to: 30 April 2024

Cancer metastasis is the leading cause of death within tumor disease and is currently an unmet clinical need. This dramatic clinical evidence requires immediate action in terms of early diagnosis and then pre-emptive therapies, not only for the primary tumor, but especially at...

Coordinated in: Italy

Programme: European Research Council (ERC)

Last update: 16 September 2022

Add to my booklet

#### SARAS Smart Autonomous Robotic Assistant Surgeon

ID: 779813

From: 1 January 2018 to: 31 December 2021

Currently during a laparoscopic operation, several units of medical personnel are requested to stay in the operating room for supporting the main surgeon teleoperating the surgical robot. In particular one assistant is always present for taking care of simple surgical...

Coordinated in: Italy

Programme: INDUSTRIAL LEADERSHIP - Leadership in enabling and industrial

technologies - Information and Communication Technologies (ICT)

Last update: 25 November 2022

Add to my booklet

#### LifeChamps A Collective Intelligence Platform to Support Cancer Champions

ID: 875329

From: 1 December 2019 to: 30 November 2023

The steady increase in life expectancy, mean age and cancer survivorship across the developed countries together with evidence from cancer and geriatrics care research bring forward the urgent need to deal with the "age issue" as a key component of global cancer care...

Coordinated in: Greece

Programme: SOCIETAL CHALLENGES - Health, demographic change and well-

being, Improving halth information and better use of health data, Transferring knowledge to

clinical practice and scalable innovation actions

Last update: 18 December 2023

Add to my booklet

SGABU Increasing scientific, technological and innovation capacity of Serbia as a Widening country in the domain of multiscale modelling and medical informatics in biomedical engineering

ID: 952603

From: 1 October 2020 to: 31 December 2023

University of Kragujevac (UKG), Serbia and specifically the group of Prof. Nenad Filipovic is a research group active in the field of multiscale modeling and medical informatics in biomedical engineering. The group has published numerous studies in scientific journals and has...

Coordinated in: Serbia

Programme: Twinning of research institutions

Last update: 28 December 2023

Add to my booklet

#### WideHealth Widening Research on Pervasive and eHealth - WideHealth

ID: 952279

From: 1 January 2021 to: 30 June 2023

The WideHealth Project (Widening Research on Pervasive eHealth) will enable research exchanges and training activities on the topic of Pervasive and eHealth. The overarching goal of the project is to enable a new generation of researchers in the Widening Countries to develop...

Coordinated in: North Macedonia

Programme: Twinning of research institutions

Last update: 27 December 2023

Add to my booklet

### NOCTURNO Non-Conventional Wave Propagation for Future Sensing and Actuating Technologies

ID: 777714

From: 1 January 2018 to: 30 June 2023

New sensing devices and technologies are the key in addressing numerous challenges that agriculture is facing today. Namely, to provide more food for the ever-growing population, a number of biophysical parameters of plants, soil and food products need to be monitored and...

Coordinated in: Serbia

Programme: EXCELLENT SCIENCE - Marie Skłodowska-Curie Actions, Stimulating

innovation by means of cross-fertilisation of knowledge

Last update: 28 December 2023

Add to my booklet

### NeuroDeRisk Neurotoxicity De-Risking in Preclinical Drug Discovery

ID: 821528

From: 1 March 2019 to: 30 September 2022

The adverse effects of pharmaceuticals on the central or peripheral nervous systems are poorly predicted by the current in vitro and in vivo preclinical studies performed during Research and Development (R&D) process. Therefore, increasing the predictivity of the preclinical...

Coordinated in: Austria

Programme: SOCIETAL CHALLENGES - Health, demographic change and well-

being, Innovative Medicines Initiative 2 (IMI2)

Last update: 11 December 2023

Add to my booklet

#### PIC Personalised In-Silico Cardiology

ID: 764738

From: 1 September 2017 to: 28 February 2022

Improving healthcare systems mandates a shift towards personalised and preventive management of disease. Specifically, the management of cardiovascular diseases has a huge impact on European society in terms of mortality, morbidity and healthcare costs, being responsible for...

Coordinated in: United Kingdom

Programme: EXCELLENT SCIENCE - Marie Skłodowska-Curie Actions, Fostering new

skills by means of excellent initial training of researchers

Last update: 28 February 2023

Add to my booklet

# Newlife New remote non-invasive monitoring solutions for ensuring the health of mothers and babies before and after birth

ID: 101095792

From: 1 January 2023 to: 31 December 2025

There is increasing focus on the well being of mothers and babies, both before and after delivery and early detection ofpathologies to prevent mother and perinatal morbidity and

mortality. The overall well being of mothers also has longer termimpact: women who remain

healthy...

Coordinated in: Netherlands

Programme: Digital, Industry and Space, Key Digital Technologies

Last update: 24 May 2023 Add to my booklet

NADIR New directions for deep learning in cancer research through concept explainability and virtual experimentation.

ID: 101114631

From: 1 January 2024 to: 31 December 2028

Deep learning (DL) is rapidly transforming cancer research and oncology. DL can extract subtle visual features from preclinical and clinical image data. In my junior research group, I have developed end-to-end DL methods to predict molecular biomarkers and clinical outcomes...

Coordinated in: Germany

Programme: European Research Council (ERC)

Last update: 26 December 2023

Add to my booklet

LEGENDARE Leveraging genomic discoveries and skeletal phenotyping to improve osteoporosis patient care

ID: 101021500

From: 1 November 2021 to: 31 October 2026

Osteoporosis is a silent, systemic skeletal disease leading to fragility fracture. While the deleterious consequences for the individual, their families and society are well established, the causes of the disease remain elusive. Despite exhaustive clinical, epidemiological and...

Coordinated in: Netherlands

Programme: EXCELLENT SCIENCE - European Research Council (ERC)

Last update: 22 September 2022

Add to my booklet

END-VOC ENDING COVID 19 VARIANTS OF CONCERN THROUGH COHORT STUDIES: END-VOC

ID: 101046314

From: 1 May 2022 to: 30 April 2025

The END-VOC consortium will support the European and global response to the COVID-19 pandemic and Variants of Concern (VOC) through well characterised cohorts and linked with existing European and international initiatives. END-VOC consists of 19 partners in Europe (UK, Spain...

Coordinated in: United Kingdom

Programme: Health, Infectious Diseases, including poverty-related and neglected diseases

Last update: 4 September 2022

Add to my booklet

### AI-POD Trustworthy AI Tools for the Prediction of Obesity Related Vascular Diseases

ID: 101080302

From: 1 May 2023 to: 30 April 2027

Weight problems and obesity are increasing at a rapid rate already concerning more than 436mio people in European countries. Obese persons have a 50% higher risk of cardio-vascular disease (CVD) mortality and treatment costs result in a total economic burden of

over 210...

Coordinated in: Germany

Programme: Health, Health throughout the Life Course

Last update: 29 June 2023 Add to my booklet

# MISTRAL a toolkit for dynaMic health Impact analysiS to predicT disability-Related costs in the Aging population based on three case studies of steeL-industry exposed areas in europe

ID: 101095119

From: 1 January 2023 to: 31 December 2026

The environment is one of the most crucial determinants of health. The Global Burden of Disease report estimates an emerging impact in terms of disability and reducing the quality of life worldwide, particularly for the aging populations. One of the root causes of this decline...

Coordinated in: Italy

Programme: <u>Health</u>, <u>Environmental and Social Health Determinants</u>

Last update: 9 December 2022

Add to my booklet

### STRATUM 3D Decision Support Tool for Brain Tumor Surgery

ID: 101137416

From: 1 December 2023 to: 30 November 2028

Integrated digital diagnostics can support complex surgeries in many anatomies where brain tumour surgery is one of the most complex cases. Neurosurgeons face several challenges during brain tumour surgeries, such as critical tissue and brain tumour margins differentiation or...

Coordinated in: Spain

Programme: Health, Tools, Technologies and Digital Solutions for Health and Care, including

personalised medicine Last update: 8 January 2024

Add to my booklet

#### <u>TeleRehaB DSS TeleRehabilitation of Balance clinical and economic Decision Support</u> System

ID: 101057747

From: 1 December 2022 to: 30 November 2025

TeleRehaB DSS targets the promotion of AI adoption in everyday clinical practice for balance rehabilitation training. An AI-based decision support system (DSS) will be developed expanding upon the existing Augmented Reality (AR) rehabilitation training platform, with its

Coordinated in: Greece

Programme: Health, Tools, Technologies and Digital Solutions for Health and Care, including

personalised medicine

Last update: 16 November 2022

Add to my booklet

### ALAMEDA Bridging the Early Diagnosis and Treatment Gap of Brain Diseases via Smart, Connected, Proactive and Evidence-based Technological Interventions

ID: 101017558

From: 1 January 2021 to: 31 December 2023

Direct costs of brain disorders make up for 60% of the total costs − which EBC estimated at 800 bln€/year in Europe. At European level, this health budget far exceeds that of cardiovascular diseases, brain diseases and diabetes together. ALAMEDA will research, develop and...

Coordinated in: Greece

Programme: <u>SOCIETAL CHALLENGES - Health, demographic change and wellbeing, Individual awareness and empowerment for self-management of health</u>

Last update: 28 December 2023

Add to my booklet

# TRUSTING A TRUSTworthy speech-based AI monitorING system for the prediction of relapse in individuals with schizophrenia

ID: 101080251

From: 1 July 2023 to: 31 December 2028

Schizophrenia affects a staggering 21 million people worldwide, with 80% of these citizens suffering from a relapsing disease, putting their health and safety at enormous risk. Timely detection of these psychotic relapses would require very frequent contact with clinicians...

Coordinated in: Netherlands

Programme: Health, Health throughout the Life Course

Last update: 29 June 2023 Add to my booklet

#### REPO4EU Precision drug REPurpOsing For EUrope and the world

ID: 101057619

From: 1 September 2022 to: 31 August 2029

Here we, a group of long-standing collaborators in innovative drug repurposing, propose to build REPO4EU, a comprehensive European/global platform for validated precision drug repurposing open to stakeholders for information, multimedia training, matchmaking and cooperation...

Coordinated in: Netherlands

Programme: Health, Tools, Technologies and Digital Solutions for Health and Care, including

personalised medicine

Last update: 4 September 2022

Add to my booklet

#### GaitREHub Intelligent Wearable System for Enhanced Personalized Gait Rehabilitation

ID: 101086348

From: 1 January 2023 to: 31 December 2026

One common consequence of specific medical conditions such as stroke or other brain injuries, and certain operations, is the need for post event rehabilitation. In many cases, the inability to walk properly requires professionally monitored gait rehabilitation. Gait...

Coordinated in: Serbia

Programme: Marie Skłodowska-Curie Actions (MSCA)

Last update: 10 October 2022

### NextGen NEXT GENERATION TOOLS FOR GENOME-CENTRIC MULTIMODAL DATA INTEGRATION IN PERSONALISED CARDIOVASCULAR MEDICINE

ID: 101136962

From: 1 January 2024 to: 31 December 2027

Healthcare is the fasted growing EU27 expenditure. Personalised medicine, comprising tailored approaches for prevention, diagnosis, monitoring and treatment is essential to reduce the burden of disease and improve the quality of life. Integration of multiple data types...

Coordinated in: Netherlands

Programme: Health, Tools, Technologies and Digital Solutions for Health and Care, including

<u>personalised medicine</u>
Last update: 8 January 2024

Add to my booklet

### PRE-ACT PRE-ACT: Prediction of Radiotherapy side Effects using explainable AI for patient Communication and Treatment modification

ID: 101057746

From: 1 October 2022 to: 30 September 2027

Radiotherapy is a widely used cancer treatment, however some patients suffer side effects. In breast cancer, side effects can include breast atrophy, arm lymphedema, and heart damage. Some factors that increase risk for side effects are known, but current approaches do not...

Coordinated in: Greece

Programme: Health, Tools, Technologies and Digital Solutions for Health and Care, including

personalised medicine

Last update: 4 September 2022

Add to my booklet

#### HERMES Hybrid Enhanced Regenerative Medicine Systems

ID: 824164

From: 1 January 2019 to: 31 December 2024

Brain disorders are the most invalidating condition, exceeding HIV, cancer and heart ischemia, with significant impact on society and public health. Regenerative medicine is a promising branch of health science that aims at restoring brain function by rebuilding brain tissue...

Coordinated in: Italy

Programme: EXCELLENT SCIENCE - Future and Emerging Technologies (FET), FET

Proactive

Last update: 1 February 2024

Add to my booklet

#### FEMaLe Finding Endometriosis using Machine Learning

ID: 101017562

From: 1 January 2021 to: 31 December 2024

The framework 'P4 Medicine' (predictive, preventative, personalized, participatory) was developed to detect and prevent disease through close monitoring, deep statistical analysis, biomarker testing, and patient health coaching to best use the limited healthcare resources and

Coordinated in: Denmark

Programme: <u>SOCIETAL CHALLENGES</u> - <u>Health</u>, <u>demographic change and wellbeing</u>, <u>Individual awareness and empowerment for self-management of health</u>

Last update: 30 January 2024

Add to my booklet

### ENT1DEP ENTEROVIRUS-LINKED TYPE 1 DIABETES EXPOSED -MECHANISMS AND PREVENTION

ID: 101137457

From: 1 January 2024 to: 31 December 2027

ENT1DEP aims to define causal links between infections and NCDs by focusing on enterovirus (EV) infections and type 1 diabetes (T1D), a robust association without proof of causality. Causality is addressed by a multidisciplinary, multi-layer approach, using in-vitro and...

Coordinated in: Finland

Programme: Health, Non-Communicable and Rare Diseases, Infectious Diseases, including

poverty-related and neglected diseases

Last update: 8 January 2024

Add to my booklet

#### TROPHY ulTRafast hOlograPHic FTIR microscopY

ID: 101047137

From: 1 September 2022 to: 28 February 2026

Many human pathologies such as cancer are due to complex biochemical alterations that start at a sub-cellular level and lead to progressive changes that result in a heterogeneous tumor composition. The polyclonality of tumor cells hampers the diagnosis and the therapy giving...

Coordinated in: Italy

Programme: The Pathfinder for Advanced Research, The European Innovation Council (EIC)

Last update: 28 July 2022 Add to my booklet

#### PAL Personal Assistant for healthy Lifestyle (PAL)

ID: 643783

From: 1 March 2015 to: 28 February 2019

Type 1 Diabetes Mellitus (T1DM) portraits a high need and challenge for self-management by young patients: a complex illness with a high and increasing prevalence, a regimen that needs adaptation to patient's condition and activities, and serious risks for complications and...

Coordinated in: Netherlands

Programme: SOCIETAL CHALLENGES - Health, demographic change and well-

being, Active ageing and self-management of health

Last update: 15 August 2022

Add to my booklet

#### AIDD Advanced machine learning for Innovative Drug Discovery

ID: 956832

From: 1 January 2021 to: 31 March 2025

"The dramatic increase in using of Artificial Intelligence (AI) and machine learning methods in different fields of science becomes an essential asset in the development of the chemical industry, including pharmaceutical, agro biotech, and other chemical companies. However...

Coordinated in: Germany

Programme: EXCELLENT SCIENCE - Marie Skłodowska-Curie Actions, Fostering new

skills by means of excellent initial training of researchers

Last update: 2 January 2024

Add to my booklet

PROJECT PROJECT PROJECT

## AIDPATH Artificial Intelligence-driven, Decentralized Production for Advanced Therapies in the Hospital

ID: 101016909

From: 1 January 2021 to: 31 December 2024

AIDPATH (Artificial Intelligence-driven, Decentralized Production for Advanced Thera-pies in the Hospital) is a high-energy EU consortium, dedicated to enable and to augment the next-generation of personalized medicine at EU hospitals through the use of AI tech-nology. The...

Coordinated in: Germany

Programme: INDUSTRIAL LEADERSHIP - Leadership in enabling and industrial

technologies - Information and Communication Technologies (ICT)

Last update: 27 December 2023

Add to my booklet

PROJECT PROJECT

# SensCare AI-based wearable sensors for continuous monitoring of diabetes and cardiovascular diseases

ID: 101113995

From: 1 July 2023 to: 31 March 2024

Cardiovascular diseases (CVDs) are the leading cause of death in Europe, with a total of 3.9 million deaths yearly, accounting for 45% of all deaths. Diabetes is another widely spread disease affecting 60 million people in the EU (10% of the total population). Diabetes is the...

Coordinated in: Türkiye

Programme: European innovation ecosystems

Last update: 28 June 2023

Add to my booklet

PROJECT

# <u>DigitalHealthEurope DigitalHealthEurope: Support to a Digital Health and Care Innovation initiative in the context of Digital Single Market strategy</u>

ID: 826353

From: 1 January 2019 to: 30 September 2021

DigitalHealthEurope will provide comprehensive, centralised support to the digital transformation of health and care (DTHC) priorities of the Digital Single Market. The partners bring a broad range of collective knowledge and expertise, originating from the longstanding...

Coordinated in: Germany

Programme: Improving scientific tools and methods to support policy making and regulatory needs, SOCIETAL CHALLENGES - Health, demographic change and well-being, Active ageing, independent and assisted living, Improving halth information and better use of health data, Individual awareness and empowerment for self-management of health

Last update: 25 April 2022

Add to my booklet

# MONALISA A SIOPEN pragmatic clinical trial to MOnitor NeuroblastomA relapse with LIquid biopsy Sensitive Analysis

ID: 101137028

From: 1 January 2024 to: 31 December 2028

High-risk neuroblastoma accounts for 15% of cancer related-deaths in children. Half of the >1500 patients yearly diagnosed with neuroblastoma in the EU have high-risk disease, which will relapse or progress in half these cases after first-line treatment. Relapsed neuroblastoma...

Coordinated in: Belgium Programme: Health

Last update: 8 January 2024

Add to my booklet

#### AffecTech Personal Technologies for Affective Health

ID: 722022

From: 1 January 2017 to: 31 March 2021

Personalized health is a European priority and one of the strategic research areas for Horizon 2020. This project advances the state-of-the-art of personal health technologies for affective disorders, estimated to be the highest ranking cause of disease by 2020. It marks a...

Coordinated in: United Kingdom

Programme: EXCELLENT SCIENCE - Marie Skłodowska-Curie Actions, Fostering new

skills by means of excellent initial training of researchers

Last update: 19 October 2022

Add to my booklet

### PHOOTONICS A Cost-Effective Photonics-based Device for Early Prediction, Monitoring and Management of Diabetic Foot Ulcers

ID: 871908

From: 1 November 2019 to: 30 June 2024

Early prediction and management of Diabetic Foot Ulcers (DFUs) is an important health factor of Europe. Recent clinical trials have concluded that NIR sensing captures oxy(deoxy)haemoglobin (HbO2, Hb) and peripheral/ tissue oxygen saturations (StO2, SpO2), thermal Infrared-IR...

Coordinated in: Lithuania

Programme: INDUSTRIAL LEADERSHIP - Leadership in enabling and industrial

technologies - Information and Communication Technologies (ICT)

Last update: 5 February 2024

Add to my booklet

### AMECRYS Revolutionising Downstream Processing of Monoclonal Antibodies by Continuous Template-Assisted Membrane Crystallization

ID: 712965

From: 1 October 2016 to: 31 March 2021

Separation and purification of biopharmaceuticals is today one of the most time and cost intense Downstream Processing (DSP) operations in the manufacture of commercial products. Separation and purification of proteins is usually achieved chromatographically, with all of its...

Coordinated in: Italy

Programme: EXCELLENT SCIENCE - Future and Emerging Technologies (FET), FET Open

Last update: 23 August 2022

Add to my booklet

#### RAMCIP Robotic Assistant for MCI patients at home

ID: 643433

From: 1 January 2015 to: 30 June 2018

RAMCIP will research and develop a novel domestic service robot, with the aim to proactively and discreetly assist older persons, MCI and AD patients in their every day life. Instead of simply being an obedient servant, the RAMCIP robot will have high-level cognitive...

Coordinated in: Greece

Programme: SOCIETAL CHALLENGES - Health, demographic change and well-

being, Active ageing and self-management of health

Last update: 5 April 2023 Add to my booklet

# SMART BEAR Smart Big Data Platform to Offer Evidence-based Personalised Support for Healthy and Independent Living at Home

ID: 857172

From: 1 September 2019 to: 31 August 2024

It is a fact that the European population growth is slowing down, while the population ageing accelerates. Rapid increases in the elderly population are predicted for the coming decades due to the ageing of post-war baby births. Within Europe's ageing population, Hearing...

Coordinated in: Italy

Programme: <u>SOCIETAL CHALLENGES</u> - <u>Health</u>, <u>demographic change and wellbeing</u>, <u>Active ageing</u>, <u>independent and assisted living</u>, <u>Future Internet: Software</u>, <u>hardware</u>, <u>Infrastructures</u>, technologies and services

Last update: 12 December 2023

Add to my booklet

#### HEIR A SECURE HEALTHCARE ENVIRONMENT FOR INFORMATICS RESILIENCE

ID: 883275

From: 1 September 2020 to: 31 August 2023

The health sector is steadily becoming the de facto target for cyberattacks. Based on the most recent ENISA report at the end of 2018, cybersecurity incidents have shown that the healthcare sector is one of the most vulnerable. Focusing specifically on Electronic Medical...

Coordinated in: France

Programme: Ensure privacy and freedom, including in the Internet and enhance the societal, legal and ethical understanding of all areas of security, risk and management, Improve cyber security, Secure societies - Protecting freedom and security of Europe and its citizens

Last update: 2 January 2024

Add to my booklet

ENDOMIX Understanding how endocrine disruptors and chemical mixtures of concern target the immune system to trigger or perpetuate disease

ID: 101136566

From: 1 January 2024 to: 31 December 2027

The ENDOMIX project addresses the urgent need to understand the true impact of endocrine disrupting chemicals (EDCs) on human health in order to inform regulators and advise citizens. ENDOMIX will tackle this challenge by revealing associations and causality between EDCs and...

Coordinated in: Germany

Programme: Health, Health throughout the Life Course, Environmental and Social Health

**Determinants** 

Last update: 17 January 2024

Add to my booklet

MINIGRAPH Minimally Invasive Neuromodulation Implant and implantation procedure based on ground-breaking GRAPHene technology for treating brain disorders

ID: 101070865

From: 1 October 2022 to: 30 September 2025

Neurostimulation therapies hold the promise to treat brain diseases refractory to pharmacological treatment. However, these therapies are not fully adopted due to important technological and clinical challenges, such as highly invasive implantation, multiple side effects due...

Coordinated in: Spain

Programme: The European Innovation Council (EIC)

Last update: 23 August 2022

Add to my booklet

PROJECT

PICASO A Personalised Integrated Care Approach for Service Organisations and Care Models for Patients with Multi-Morbidity and Chronic Conditions

ID: 689209

From: 1 February 2016 to: 30 June 2019

The vision of the PICASO project is that it will become a Europe-wide Continuum of Care service platform that:will improve cooperation and exchange of knowledge between professional caregivers in health, rehabilitation and social care domains and actively include patients and...

Coordinated in: Germany

Programme: SOCIETAL CHALLENGES - Health, demographic change and well-

being, Health care provision and integrated care

Last update: 15 August 2022

Add to my booklet

PROJECT PROJECT

ebeam4therapy Very High Energy Electrons Beam for Radiotherapy

ID: 101056951

From: 1 August 2022 to: 31 July 2025

Despite advanced treatment planning and delivery, conventional oncologic radiotherapy (RT) is limited by acute toxicity and long-term side effects caused by radiation delivery to healthy tissues, which often restricts the ability to deliver a sufficient dose of radiation to...

Coordinated in: Israel

Programme: The European Innovation Council (EIC)

Last update: 28 July 2022

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PROJECT PROJECT PROJECT PROJECT PROJECT

### PREDICT A new era in personalised medicine: Radiomics as decision support tool for diagnostics and theragnostics in oncology

ID: 766276

From: 1 October 2017 to: 31 March 2022

The high degree of tumour (genomic and phenotypic) heterogeneity influences patient's response to therapy and hampers wide deployment of personalised medicine for cancer treatment. Thus, there is an imperative need for new technologies that can accurately detect tumour...

Coordinated in: Netherlands

Programme: EXCELLENT SCIENCE - Marie Skłodowska-Curie Actions, Fostering new

skills by means of excellent initial training of researchers

Last update: 10 March 2023

Add to my booklet

#### Sano Centre for New Methods in Computational Diagnostics and Personalised Therapy

ID: 857533

From: 1 August 2019 to: 31 July 2026

This proposal describes the creation in Kraków, Poland, of a centre for Computational Medicine. The Centre will be a major driver for European advancement in this rapidly growing sector, developing sophisticated engineering methods for the prevention, diagnosis and treatment...

Coordinated in: Poland

Programme: Teaming of excellent research institutions and low performing RDI regions

Last update: 15 January 2024

Add to my booklet

### <u>VALIDATE V A L I D A T E - Validation of a Trustworthy AI-based Clinical Decision</u> <u>Support System for Improving Patient Outcome in Acute Stroke Treatment</u>

ID: 101057263

From: 1 May 2022 to: 30 April 2026

Based on previously developed models and an existing prototype of a clinical decision support system (patent pending), we set out in this project to further develop, test, and validate this clinical decision support for the treatment stratification of acute stroke patients to...

Coordinated in: Germany

Programme: Health, Tools, Technologies and Digital Solutions for Health and Care, including

personalised medicine Last update: 2 August 2022

Add to my booklet

#### GrowMeUp GrowMeUp

ID: 643647

From: 1 February 2015 to: 31 January 2018

GrowMeUp's main aim is to increase the years of independent and active living, and the quality of life of older persons (age of 65+) with light physical or mental health problems who live alone at home and can find pleasure and relief in getting support or stimulation to...

Coordinated in: Portugal

Programme: SOCIETAL CHALLENGES - Health, demographic change and well-

being, Active ageing and self-management of health

Last update: 7 December 2023

Add to my booklet

#### iBILD iBILD: Imaging Biomarker for Intelligent Lung Cancer Detection

ID: 719496

From: 1 April 2016 to: 30 September 2016

Lung cancer is one of the most common cancers with the highest mortality rate both in Europe and Worldwide. In 2012, 449,000 new cases were diagnosed with 388,000 deaths recorded in Europe alone. The reason for the 86% mortality rate is that most lung cancers are detected only...

Coordinated in: United Kingdom

Programme: SOCIETAL CHALLENGES - Health, demographic change and well-

being, Treating and managing disease

Last update: 11 August 2022

Add to my booklet

<u>TissueMaps Integrating spatial and genetic information via automated image analysis and interactive visualization of tissue data</u>

ID: 682810

From: 1 April 2016 to: 31 March 2022

Digital imaging of tissue samples and genetic analysis by next generation sequencing are two rapidly emerging fields in pathology. The exponential growth in digital imaging in pathology is catalyzed by more advanced imaging hardware, comparable to the complete shift from...

Coordinated in: Sweden

Programme: EXCELLENT SCIENCE - European Research Council (ERC)

Last update: 22 September 2022

Add to my booklet

PROJECT PROJECT

4-IN THE LUNG RUN 4-IN THE LUNG RUN: towards INdividually tailored INvitations, screening INtervals, and INtegrated co-morbidity reducing strategies in lung cancer screening ID: 848294

From: 1 January 2020 to: 31 December 2024

With 338,000 EU-deaths annually, lung cancer is a devastating problem. CT screening has the potential to prevent ten-thousands of lung cancer deaths annually. The positive results of the Dutch-Belgian screening trial (NELSON), with relatively low referral rates, and the NLST...

Coordinated in: Netherlands

Programme: SOCIETAL CHALLENGES - Health, demographic change and well-

being, Preventing disease
Last update: 15 January 2024

Add to my booklet

#### LEOPARD Liver Electronic Offering Platform with Artificial intelligence-based Devices

ID: 101080964

From: 1 November 2023 to: 31 October 2028

Liver transplantation (LT) is a life-saving procedure for decompensated cirrhosis (DC) and hepato-cellular carcinoma (HCC). Its efficacy is hampered by the risk of death/drop-out on the Wait List (WL). This risk is driven by organ shortage and is mitigated by organ offering...

Coordinated in: France

Programme: <u>Health</u>, <u>Tools</u>, <u>Technologies and Digital Solutions for Health and Care, including</u>

personalised medicine

Last update: 1 November 2023

Add to my booklet

# TransQST Translational quantitative systems toxicology to improve the understanding of the safety of medicines - Sofia: 116030

ID: 116030

From: 1 January 2017 to: 31 August 2022

TransQST will develop a Quantitative Systems Toxicology (QST) approach, employing preexisting data where possible, in order to yield new mechanistic insight into drug-induced toxicity. A central tenet of our programme will be to ensure the human physiological and...

Coordinated in: United Kingdom

Programme: SOCIETAL CHALLENGES - Health, demographic change and well-

being, Innovative Medicines Initiative 2 (IMI2)

Last update: 7 December 2023

Add to my booklet

#### FBI Multimodal, Functional Bio-Photonic Imaging

ID: 721766

From: 1 October 2016 to: 31 March 2021

FBI fosters education of ESRs on an emerging, multimodal imaging platform and its translation into clinical and biological applications. In FBI, 15 ESRs are trained at world-leading European academic institutions and companies, thus forming strong interdisciplinary relations...

Coordinated in: Denmark

Programme: EXCELLENT SCIENCE - Marie Skłodowska-Curie Actions, Fostering new

skills by means of excellent initial training of researchers

Last update: 23 August 2022

Add to my booklet

### <u>DEFINITIVE Diagnostic HER2DX-guided treatment for patients with early-stage HER2-positive breast cancer</u>

ID: 101136953

From: 1 December 2023 to: 30 November 2028

HER2+ breast cancer affects around 390.000 women annually worldwide (i.e. 3 patients every 4 minutes). Over the last decade, polychemotherapy and HER2-targeted therapies have

improved patient's survival; however, the reality is that most patients are cured with less intense...

Coordinated in: Spain Programme: <u>Health</u>

Last update: 8 January 2024

Add to my booklet

PROJECT PROJECT PROJECT

MARVEL Evolving reversible iMmunocapture by membrane sensing peptides: towARds scalable extracellular VEsicLes isolation

ID: 951768

From: 1 November 2020 to: 30 April 2023

Extracellular vesicles (EV) are submicron membrane vesicles released by most cells with a fundamental role in cell-to-cell communication. Much interest is flourishing towards their exploitation in regenerative medicine and diagnostics. However, the fulfilment of the EV promise...

Coordinated in: Italy

Programme: EXCELLENT SCIENCE - Future and Emerging Technologies (FET), FET

**Proactive** 

Last update: 27 December 2023

Add to my booklet

PROJECT

EOSC4Cancer A European-wide foundation to accelerate Data-driven Cancer Research

ID: 101058427

From: 1 September 2022 to: 28 February 2025

Cancer complex nature requires integration of advanced research data across national boundaries to enable progress. Indeed, the Horizon Europe mission board for cancer has identified access to data, knowledge and digital services - accessible across the European Research Area...

Coordinated in: Spain

Programme: Research infrastructures, Consolidating and Developing the Landscape of

European Research Infrastructures

Last update: 10 March 2023

Add to my booklet

PROJECT PROJECT PROJECT PROJECT

INNO4COV-19 Boosting Innovation for COVID-19 Diagnostic, Prevention and Surveillance.

ID: 101016203

From: 1 October 2020 to: 30 November 2022

The novel corona virus causing COVID-19 overwhelmed Europe and the world in just a few weeks' time. Small and Medium-sized Entrerprises (SMEs are put at very high risk by the slowdown or shutdown of economic life in their countries – exactly those companies who ensure the...

Coordinated in: Portugal

Programme: SOCIETAL CHALLENGES - Health, demographic change and well-being

Last update: 28 December 2023

Add to my booklet

<u>COMFORT COMputational Models FOR patienT stratification in urologic cancers – Creating</u> robust and trustworthy multimodal AI for health care

ID: 101079894

From: 1 April 2023 to: 31 March 2027

In the EU, treating patients with prostate (PCa) and kidney cancer (KC) costs more than  $\in$ 6.6 billion annually. Yet, PCa and KC are often managed inadequately, which is associated with high costs and negative consequences such as hospitalisation, psychosocial stress and...

Coordinated in: Germany

Programme: Health, Tools, Technologies and Digital Solutions for Health and Care, including

personalised medicine
Last update: 29 June 2023
Add to my booklet

#### EPHOR Exposome project for health and occupational research

ID: 874703

From: 1 January 2020 to: 30 June 2025

Exposures at the workplace contribute to many non-communicable diseases (NCDs) with a similar magnitude as urban air pollution or obesity. Given the associated societal and economic (2-6% GDP) pressure, ensuring a healthy work environment is a strategic goal for the European...

Coordinated in: Netherlands

Programme: SOCIETAL CHALLENGES - Health, demographic change and well-

being, Preventing disease

Last update: 29 December 2023

Add to my booklet

#### ELGN-GI A first-in-class therapy for intestinal malabsorption in premature newborns

ID: 190151578

From: 1 November 2022 to: 31 October 2024

Around 10% babies are born preterm, and premature birth is the 1st cause of new-born deaths. Preterm infants are born with an underdeveloped gastrointestinal (GI) tract, causing intestinal malabsorption. At the first weeks of life, adequate nutrition is critical for brain and...

Coordinated in: Israel

Programme: The European Innovation Council (EIC)

Last update: 29 June 2023 Add to my booklet

# RESOLVE Residual disease assessment in hematologic malignancies to improve patient-relevant outcomes across Europe (RESOLVE)

ID: 101136502

From: 1 April 2024 to: 31 March 2029

"MeMeasurable residual disease (MRD) detected by multiparameter flow cytometry (MFC) has strong prognostic value in patients with the most frequent acute and chronic leukemias, acute myeloid (AML) and chronic lymphocytic leukemia (CLL), but it has not yet been confirmed as a...

Coordinated in: Germany Programme: <u>Health</u>

Last update: 8 January 2024

Add to my booklet

### LONGITOOLS Dynamic longitudinal exposome trajectories in cardiovascular and metabolic non-communicable diseases

ID: 874739

From: 1 January 2020 to: 30 June 2025

Environmental factors, including air and noise pollution, and the built environment, are typically associated with cardiovascular and metabolic non-communicable diseases (NCDs), e.g. obesity, type 2 diabetes, heart diseases and atherosclerosis. The extent to which these...

Coordinated in: Finland

Programme: SOCIETAL CHALLENGES - Health, demographic change and well-

being, Preventing disease

Last update: 19 December 2023

Add to my booklet

# <u>DL-ElastoMark A deep learning-derived</u>, shear wave elastography biomarker for cancer therapy prediction

ID: 101065325

From: 1 September 2023 to: 31 August 2025

The efficacy of standard cancer therapies varies, and while some patients respond to a particular treatment, other patients do not gain any benefit. In response, an era of individualized cancer treatments is emerging which are based on the identification of biomarkers that...

Coordinated in: Cyprus

Programme: Marie Skłodowska-Curie Actions (MSCA)

Last update: 12 September 2022

Add to my booklet

# <u>PandeVITA Pandemic Virus Trace Application for the Effective Knowledge Transfer Between Science and Society Inside the Quadruple Helix Collaboration</u>

ID: 101006316

From: 1 January 2021 to: 31 August 2023

The concept of PandeVITA enables knowledge transfer between society and science inside of the quadruple helix on the European level. With help of the PandeVITA app, the consortium will create and execute an innovative evaluation concept based on different feedback categories...

Coordinated in: Türkiye

Programme: SCIENCE WITH AND FOR SOCIETY

Last update: 28 December 2023

Add to my booklet

ONCODIR ONCODIR – Evidence-based Participatory Decision Making for Cancer Prevention through implementation research

ID: 101104777

From: 1 June 2023 to: 30 November 2026

Colorectal cancer (CRC) is one of the most common cancer types and its increased occurrence may be attributable to adverse health behaviors, especially in lower socioeconomic status populations. Stemming from the specific risk factors identified with CRC, ONCODIR integrates...

Coordinated in: Greece Programme: <u>Health</u> Last update: 24 July 2023

Add to my booklet

#### **PROJECT**

ehcoBUTLER ehcoBUTLER. A global ecosystem for the independent and healty living of elder people with mild cognitive impairments.

ID: 643566

From: 1 January 2015 to: 31 March 2022

The ehcoBUTLER Idea:Nowadays, it is a fact that Europe is ageing. A common characteristic of elders is the frequent occurrence of either physical or mild cognitive impairments. This situation brings new challenges in how to improve the independence and quality of life of...

Coordinated in: Spain

Programme: SOCIETAL CHALLENGES - Health, demographic change and well-

being, Health care provision and integrated care

Last update: 23 December 2022

Add to my booklet

### eStandards eHealth Standards and Profiles in Action for Europe and Beyond

ID: 643889

From: 1 May 2015 to: 31 July 2017

The eStandards CSA is proposed by HL7, CEN TC251, & IHE, leading Standards Organizations (SDOs), and is supported by the eHealth Network, ISO TC215, GS1, IHTSDO, IEEE11073, and IMIA to advance eHealth interoperability and global alignment of standards with seven objectives: 1...

Coordinated in: Belgium

Programme: SOCIETAL CHALLENGES - Health, demographic change and well-

being, Methods and data

Last update: 4 September 2022

Add to my booklet

#### EASY-Diabetes Individualised and Equitable Care of Type 2 Diabetes

ID: 877170

From: 1 November 2019 to: 29 February 2020

EASY – Diabetes is a digital health solution that helps patients with Type 2 diabetes and health care providers analyse dataand make better decisions about therapies by accessing a carefully curated global database based on clinical data and medical evidence collected over...

Coordinated in: Sweden

Programme: PRIORITY 'Societal challenges, INDUSTRIAL LEADERSHIP - Innovation In SMEs, INDUSTRIAL LEADERSHIP - Leadership in enabling and industrial technologies

Last update: 16 August 2022

Add to my booklet

### ENORASI Virtual Environments for the Training of Visually Impaired

ID: IST-2000-25231

From: 1 January 2001 to: 31 December 2003

The ENORASI project aims at developing a highly interactive and extensible virtual reality system that will allow visually impaired people, especially those blind from birth, to study and interact with various virtual objects. ENORASI will not only introduce techniques for the...

Coordinated in: Greece

Programme: Programme for research, technological development and demonstration on a

"User-friendly information society, 1998-2002"

Last update: 13 June 2005 Add to my booklet

# CORESMA COVID-19-Outbreak Response combining E-health, Serolomics, Modelling, Artificial Intelligence and Implementation Research

ID: 101003480

From: 1 April 2020 to: 31 December 2023

Among the biggest challenges in the COVID-19 outbreak are the lack of triangulation of clinical, epidemiologic and immunological information for evidence- based response strategies. Our overriding ambition is to overcome this deficit through field studies and implementation...

Coordinated in: Germany

Programme: SOCIETAL CHALLENGES - Health, demographic change and well-

being, Treating and managing disease Last update: 27 December 2023

Add to my booklet

#### GEYEDANCE AI guidance for robot-assisted eye surgery

ID: 101070443

From: 1 September 2022 to: 31 August 2025

"Retina indications are the leading cause of visual impairment in industrialized countries and posing a big unmet socio-economic challenge. Performing surgical actions directly at the retina - one of the most delicate and sensitive areas of the human body - with ultra-thin...

Coordinated in: Austria

Programme: Digital, Industry and Space, Artificial Intelligence and Robotics

Last update: 23 August 2022

Add to my booklet

Fox-IT Fitting-to-Outcome eXpert for semi-automated cochlear implant fine-tuning

ID: 735134

From: 1 August 2016 to: 30 November 2016

For many deaf patients cochlear implantation has become the standard state-of-the-art care.

To achieve optimal hearing performance, cochlear implants need to be adjusted to the individual needs of the user. To date, this has to be done manually by an experienced

audiologist...

Coordinated in: Belgium

Programme: SOCIETAL CHALLENGES - Health, demographic change and wellbeing, Active ageing and self-management of health, INDUSTRIAL LEADERSHIP -Leadership in enabling and industrial technologies - Information and Communication Technologies (ICT), Mainstreaming SME support, especially through a dedicated instrument, Health care provision and integrated care

Last update: 12 August 2022

Add to my booklet

BrainConquest Boosting Brain-Computer Communication with high Quality User Training

ID: 714567

From: 1 July 2017 to: 31 December 2022

Brain-Computer Interfaces (BCIs) are communication systems that enable users to send commands to computers through brain signals only, by measuring and processing these signals. Making computer control possible without any physical activity, BCIs have promised to revolutionize...

Coordinated in: France

Programme: EXCELLENT SCIENCE - European Research Council (ERC)

Last update: 6 February 2024

Add to my booklet

CY-BIOBANK Biobanking and the Cyprus Human Genome Project

ID: 857122

From: 1 October 2019 to: 30 September 2026

The genetic investigation of diseases and eHealth are a priority of the Smart Specialization Strategy of Cyprus. The strategy can best be served by creating a Centre of Excellence (CoE) with two pillars: a) A contemporary Biobank research infrastructure that incorporates...

Coordinated in: Cyprus

Programme: Teaming of excellent research institutions and low performing RDI regions

Last update: 15 January 2024

Add to my booklet

GLOMICAVE Global Omic Data Integration on Animal, Vegetal and Environment Sectors

ID: 952908

From: 1 November 2020 to: 30 April 2024

Massive increases in analytical throughput together with reductions in costs have enabled multi-omics studies to be routinely performed at a scale not previously imagined. Two main barriers hamper our ability to reveal the mechanism behind a specific genotype-phenotype link:...

Coordinated in: Spain

Programme: INDUSTRIAL LEADERSHIP - Leadership in enabling and industrial

<u>technologies – Biotechnology</u> Last update: 28 December 2023

Add to my booklet

### ARCHIMEDES dAta-dRiven integrated approaches to CHemIcal safety assessMEnt and Drug dEvelopment

ID: 101043848

From: 1 September 2022 to: 31 August 2027

Traditional in vivo tesTraditional in vivo tests are hampering the development of new, safe and effective chemicals and drugs. If on one hand we need to ensure that dangerous chemicals do not emerge, on the other, we also need to promote rapid and sustainable innovation to...

Coordinated in: Finland

Programme: European Research Council (ERC)

Last update: 5 April 2023 Add to my booklet

#### bAles Integrative, AI-aided Inference of Protein Structure and Dynamics

ID: 101086685

From: 1 August 2023 to: 31 July 2028

The life sciences community is living in exciting times. During the past year, Artificial Intelligence (AI), and in particular AlphaFold2, has contributed to advancing our understanding of protein behaviour by enabling structure prediction with accuracy comparable to many...

Coordinated in: France

Programme: European Research Council (ERC)

Last update: 13 July 2023 Add to my booklet

#### OMICSENS integrated nano-photonic OMICs bio-SENSor for lung cancer

ID: 101129734

From: 1 January 2024 to: 31 December 2026

OMICSENS aims to develop a radically new omics measurement platform that would be initially applied to improve non-small cell lung cancer (NSCLC) prognosis by ensuring a timely and accurate detection of Tyrosine Kinase Inhibitor (TKI) resistance associated to Epidermal Growth...

Coordinated in: Italy

Programme: The European Innovation Council (EIC)

Last update: 14 November 2023

Add to my booklet

### PROJECT PROJECT

#### BSPA Bone Surgery Preparation AIde

ID: 837120

From: 1 December 2018 to: 31 May 2019

Healthplus.ai has developed a Proof-of-Concept version (TRL level 3) of an Artificial Intelligence (AI) tool to be offered as a Software as a Service (SaaS) solution and able to automatically and very precisely annotate, segment and 3D visualize unique bone and fracture...

Coordinated in: Netherlands

Programme: PRIORITY 'Societal challenges, INDUSTRIAL LEADERSHIP - Innovation In SMEs, INDUSTRIAL LEADERSHIP - Leadership in enabling and industrial technologies

Last update: 15 August 2022

Add to my booklet

<u>PhyNeTouch Multiphysics modelling and neural networks synergy to enhance the outcome of</u> robotic catheter ablation for the treatment of atrial fibrillation

ID: 101024463

From: 1 January 2022 to: 31 December 2023

Atrial fibrillation is the most common cardiac arrhythmia affecting more than 7.6 million people in Europe, while future projections estimate a worldwide increase by over 60%. Catheter ablation has evolved over the last decades to an important therapeutic modality for patients...

Coordinated in: United Kingdom

Programme: EXCELLENT SCIENCE - Marie Skłodowska-Curie Actions, Nurturing

excellence by means of cross-border and cross-sector mobility

Last update: 28 December 2023

Add to my booklet

iBack Individualized treatment planning in chronic back pain patients by advanced imaging and multi-parametric biomechanical models

ID: 637164

From: 1 June 2015 to: 30 November 2020

Chronic back pain is a major burden and source of disability worldwide. It is primarily attributed to biomechanical factors. In elderly patients, osteoporosis complicates the biomechanical scenario. Surgery is often required to treat instability-related pain and to restore the...

Coordinated in: Germany

Programme: EXCELLENT SCIENCE - European Research Council (ERC)

Last update: 22 August 2022

Add to my booklet

## UNITE4TB ACADEMIA AND INDUSTRY UNITED INNOVATION AND TREATMENT FOR TUBERCULOSIS

ID: 101007873

From: 1 June 2021 to: 31 May 2028

Current anti-tuberculosis (TB) drug regimens face serious limitations at times of increasing antimicrobial drug resistance. Fortunately, for the first time for centuries, several novel anti-TB compounds are available for clinical evaluation. As the traditional approach to...

Coordinated in: Netherlands

Programme: SOCIETAL CHALLENGES - Health, demographic change and well-

being, Innovative Medicines Initiative 2 (IMI2)

Last update: 19 January 2024

Add to my booklet

### EnhancerDesign AI-driven enhancer design for gene therapy

ID: 963884

From: 1 January 2021 to: 30 June 2022

Gene therapy promises to become a durable clinical option for a whole range of diseases, including monogenic hereditary diseases, cancer and neurodegenerative disorders. However, the development of new gene therapy-based treatments strongly depends on regulatory drivers that...

Coordinated in: Belgium

Programme: EXCELLENT SCIENCE - European Research Council (ERC)

Last update: 2 December 2022

Add to my booklet

### ECSTATIC Electrostructural Tomography – Towards Multiparametric Imaging of Cardiac **Electrical Disorders**

ID: 715093

From: 1 February 2017 to: 31 July 2022

Cardiac electrical diseases are directly responsible for sudden cardiac death, heart failure and stroke. They result from a complex interplay between myocardial electrical activation and structural heterogeneity. Current diagnostic strategy based on separate...

Coordinated in: France

Programme: EXCELLENT SCIENCE - European Research Council (ERC)

Last update: 25 November 2022

Add to my booklet

#### MICROBIS Metabolites Inducers of Cross-tolerance to Biotic Stress

ID: 101028809

From: 15 September 2021 to: 14 September 2023

Ensuring food security and accessibility represents a global challenge since world population grows exponentially while crop quality and productivity is restricted by limitations on arable areas and increasing incidence of stress conditions due to climate change. Plant...

Coordinated in: Spain

Programme: EXCELLENT SCIENCE - Marie Skłodowska-Curie Actions, Nurturing

excellence by means of cross-border and cross-sector mobility

Last update: 24 August 2022

Add to my booklet

UNITI Unification of treatments and Interventions for Tinnitus patients

ID: 848261

From: 1 January 2020 to: 30 September 2023

Tinnitus is the perception of a phantom sound and the patient's reaction to it. Tinnitus remains a scientific and clinical enigma of iTinnitus is the perception of a phantom sound and the patient's reaction to it. Although much progress has been made, tinnitus remains a...

Coordinated in: Germany

Programme: SOCIETAL CHALLENGES - Health, demographic change and well-

being, Understanding health, wellbeing and disease

Last update: 5 February 2024

Add to my booklet

### V-HAB Optimizing Vision reHABilition with virtual-reality games in paediatric amblyopia

ID: 890641

From: 1 March 2021 to: 10 August 2024

To reach for a bottle (motor), we need to be able to identify its properties (attention) and know where in space it is located (3-dimensional (3D) vision). This cascade is however impaired in some developmental disorders of vision, like Paediatric Amblyopia (PA) or lazy eye...

Coordinated in: Switzerland

Programme: EXCELLENT SCIENCE - Marie Skłodowska-Curie Actions, Nurturing

excellence by means of cross-border and cross-sector mobility

Last update: 19 December 2023

Add to my booklet

#### DeepHealth Deep-Learning and HPC to Boost Biomedical Applications for Health

ID: 825111

From: 1 January 2019 to: 30 June 2022

Health scientific discovery and innovation are expected to quickly move forward under the so called "fourth paradigm of science", which relies on unifying the traditionally separated and heterogeneous high-performance computing and big data analytics environments. Under...

Coordinated in: Spain

Programme: INDUSTRIAL LEADERSHIP - Leadership in enabling and industrial

technologies - Information and Communication Technologies (ICT)

Last update: 11 December 2023

Add to my booklet

### PRIME A Personalised Living Cell Synthetic Computing Circuit for Sensing and Treating Neurodegenerative Disorders

ID: 964712

From: 1 February 2021 to: 31 January 2025

There remain urgent and unmet needs for the treatment of neurological diseases. Epilepsy is a serious, chronic brain disease characterized by recurrent seizures. Closed-loop, implanted devices offer ways to reduce seizures in drug-resistant patients but their efficacy is poor...

Coordinated in: Ireland

Programme: EXCELLENT SCIENCE - Future and Emerging Technologies (FET), FET Open

Last update: 3 March 2023

Add to my booklet

### ERA4TB EUROPEAN REGIMEN ACCELERATOR FOR TUBERCULOSIS

ID: 853989

From: 1 January 2020 to: 31 December 2025

The European Regimen Accelerator for Tuberculosis (ERA4TB) has the explicit goal of developing a new combination therapy to treat all forms of TB starting from ~20 leads and drug candidates provided by EFPIA. Since details of these are as yet unavailable, we will implement an...

Coordinated in: Spain

Programme: SOCIETAL CHALLENGES - Health, demographic change and well-

being, Innovative Medicines Initiative 2 (IMI2)

Last update: 24 January 2024

Add to my booklet

<u>Visual Proteomics Biomarker discovery by AI-guided, image based single-cell isolation</u> proteomics

ID: 846795

From: 1 April 2019 to: 31 March 2021

Early detection of severe malignancies such as cancer is the most effective way to increase patient survival, but early diagnosis and prediction of treatment outcome critically depend on disease-specific biomarkers. However, molecular and cellular disease heterogeneity provide...

Coordinated in: Denmark

Programme: EXCELLENT SCIENCE - Marie Skłodowska-Curie Actions, Nurturing

excellence by means of cross-border and cross-sector mobility

Last update: 22 August 2022

Add to my booklet

MITO The function and biomarker potential of mitochondrial microRNAs in hypertension

ID: 893435

From: 3 August 2020 to: 2 August 2022

Hypertension is an extreme public health problem affecting nearly one third of the World's adult population. Most cardiovascular diseases are provoked by hypertension resulting in an estimated 9.4 million deaths every year. Surprisingly, the diagnosis of hypertension has...

Coordinated in: Luxembourg

Programme: EXCELLENT SCIENCE - Marie Skłodowska-Curie Actions, Nurturing

excellence by means of cross-border and cross-sector mobility

Last update: 23 December 2022

Add to my booklet

<u>IB4SD-TRISTAN Imaging Biomarkers (IBs) for Safer Drugs: Validation of Translational</u> Imaging Methods in Drug Safety Assessment - Sofia ref.: 116106

ID: 116106

From: 1 January 2017 to: 31 December 2024

1.Our consortium has broad, deep experience of drug development and imaging biomarker (IB) validation. We are internationally recognized experts in transporter biology, animal models of lung injury, toxicology, DCEMRI, compartmental modeling, 1H&129Xe lung MR, and labeling of...

Coordinated in: Belgium

Programme: SOCIETAL CHALLENGES - Health, demographic change and well-

being, Innovative Medicines Initiative 2 (IMI2)

Last update: 1 February 2024

Add to my booklet

<u>ThrombUS</u>+: Wearable Continuous Point-of-Care Monitoring, Risk Estimation and Prevention for Deep Vein Thrombosis

ID: 101137227

From: 1 January 2024 to: 30 June 2027

Deep vein thrombosis (DVT) is the formation of a blood clot within the deep veins, most commonly those of the lower limbs, causing obstruction of blood flow. In 50% of people with DVT, the clot eventually breaks off and travels to the lung to cause pulmonary embolism.

Clinical...

Coordinated in: Greece

Programme: Health, Tools, Technologies and Digital Solutions for Health and Care, including

personalised medicine Last update: 8 January 2024

Add to my booklet

### MULTIR MULti-Tumour based prediction and manipulation of Immune Response

ID: 101136926

From: 1 January 2024 to: 31 December 2027

Only few patients respond to tumor treatment as desired. Treatment heavily relies on host tumor interactions, including exploiting the host immune response against the tumor. The underlying mechanisms of host tumor interaction are largely unknown, guidance on specific...

Coordinated in: France Programme: <u>Health</u>

Last update: 8 January 2024

Add to my booklet

TIQUE InnovaTIve care services, enhanced with technology, to deliver QUick rEsponses for individuals with advanced heart failure and complex care needs through integrated care

ID: 965356

From: 1 March 2021 to: 28 February 2026

Heart failure (HF) is the leading cause of hospitalisation in people over the age of 65 and carries a high cost to healthcare systems. It also exerts a significant economic toll on patients, their families and society in general; more the 15 million people are living with HF...

Coordinated in: Spain

Programme: SOCIETAL CHALLENGES - Health, demographic change and well-

being, Health care provision and integrated care

Last update: 24 November 2023

Add to my booklet

**PROJECT** 

### LIGATE LIgand Generator and portable drug discovery platform AT Exascale

ID: 956137

From: 1 January 2021 to: 30 April 2024

Today digital revolution is having a dramatic impact on the pharmaceutical industry and the entire healthcare system. The implementation of machine learning, extreme scale computer simulations, and big data analytics in the drug design and development process offer an...

Coordinated in: Italy

Programme: INDUSTRIAL LEADERSHIP - Leadership in enabling and industrial technologies - Information and Communication Technologies (ICT), Next generation computing: Advanced and secure computing systems and technologies, including cloud computing

Last update: 27 December 2023

Add to my booklet

OPADE Optimise and predict antidepressant efficacy for patient with major depressive disorders using multi-omics analysis and AI-predictive tool

ID: 101095436

From: 1 December 2022 to: 31 May 2027

280M of people worldwide suffers from major depressive disorders (MDD). Although a well-populated therapeutic landscape of anti-depre280M of people worldwide suffers from major depressive disorders (MDD). Although a well-populated therapeutic landscape of anti-depressants, the...

Coordinated in: Italy

Programme: <u>Health</u>, <u>Tools</u>, <u>Technologies and Digital Solutions for Health and Care, including</u>

personalised medicine
Last update: 4 May 2023
Add to my booklet

BRAV3 Computational biomechanics and bioengineering 3D printing to develop a personalized regenerative biological ventricular assist device to provide lasting functional support to damaged hearts

ID: 874827

From: 1 January 2020 to: 31 December 2024

Ischemic heart disease is the main cause of death in the EU, straining patients and economies. Regenerative Medicine has failed at delivering a definitive solution, and even the

breakthrough of cell reprogramming, biomaterials or 3D printing, have not been able to find a...

Coordinated in: Spain

Programme: SOCIETAL CHALLENGES - Health, demographic change and well-

being, Treating and managing disease

Last update: 5 February 2024

Add to my booklet

TransPharm Transforming into a sustainable European pharmaceutical sector

ID: 101057816

From: 1 June 2022 to: 31 May 2026

TransPharm two-track approach focusses on the one hand on the compounds itself by identifying greener and more sustainable-by-design Active Pharmaceutical Ingredients (APIs)

and on the other hand reducing the environmental impact and resilience of the manufacturing process by...

Coordinated in: Belgium

Programme: Health, Tools, Technologies and Digital Solutions for Health and Care, including

personalised medicine
Last update: 29 July 2022
Add to my booklet

DRAGON The RapiD and SecuRe AI enhAnced DiaGnosis, Precision Medicine and Patient EmpOwerment Centered Decision Support System for Coronavirus PaNdemics

ID: 101005122

From: 1 October 2020 to: 31 March 2024

In this project, a multinational consortium of high-tech SMEs, academic research institutes, biotech and pharma partners, affiliated patient-centred organisations and professional societies will achieve a multi-faceted diagnostic and prognostic platform and a precision...

Coordinated in: Netherlands

Programme: SOCIETAL CHALLENGES - Health, demographic change and well-

being, Innovative Medicines Initiative 2 (IMI2)

Last update: 19 January 2024

Add to my booklet

PreventIT Early risk detection and prevention in ageing people by self-administered ICT-supported assessment and a behavioural change intervention delivered by use of smartphones and smartwatches

ID: 689238

From: 1 January 2016 to: 31 March 2019

Lifestyle, disease and biology put older people at risk of functional decline, leading to falls, cognitive impairment, frailty, and negative consequences for quality of life. PreventIT will develop and test an ICT based mHealth System (iPAS) for the consumer market that 1)...

Coordinated in: Norway

Programme: SOCIETAL CHALLENGES - Health, demographic change and well-

being, Active ageing and self-management of health

Last update: 16 August 2022

Add to my booklet

### LITMUS Liver Investigation: Testing Marker Utility in Steatohepatitis

ID: 777377

From: 1 November 2017 to: 29 February 2024

Strongly associated with the epidemics of obesity and type 2 diabetes that are testing healthcare systems worldwide, Non-Alcoholic Fatty Liver Disease (NAFLD) is an increasingly common cause of advanced liver disease that is characterized by substantial inter-patient...

Coordinated in: United Kingdom

Programme: SOCIETAL CHALLENGES - Health, demographic change and well-

being, Innovative Medicines Initiative 2 (IMI2)

Last update: 1 February 2024

Add to my booklet

COMMUTE COMORBIDITY MECHANISMS UTILIZED IN HEALTHCARE

ID: 101136957

From: 1 December 2023 to: 30 November 2027

The COVID pandemic can be seen as an experiment done with the entirety of humankind (as almost everybody has been or will get infected with SARS-CoV-2). It will therefore have the best coverage over the widest variation possible and is therefore ideally suited to study the...

Coordinated in: Germany

Programme: Health, Non-Communicable and Rare Diseases, Infectious Diseases, including

poverty-related and neglected diseases

Last update: 8 January 2024

Add to my booklet

SynAir-G Disrupting Noxious Synergies of Indoor Air Pollutants and their Impact in Childhood Health and Wellbeing, using Advanced Intelligent Multisensing and Green Interventions

ID: 101057271

From: 1 September 2022 to: 31 August 2026

While the number and types of indoor air pollutants is rising, much is suspected but little is known about the impact of their potentially synergistic interactions, upon human health. Highly susceptible populations include children, allergy and asthma sufferers, and a low...

Coordinated in: Greece

Programme: Health, Environmental and Social Health Determinants

Last update: 23 August 2022

Add to my booklet

STRATEGY-CKD System omics to unravel the gut-kidney axis in Chronic Kidney Disease.

ID: 860329

From: 1 February 2020 to: 31 July 2024

System omics to unravel the gut-kidney axis in Chronic Kidney Disease: There is a great need for multi-disciplinary and methodologically well trained scientists in order to unravel complex diseases. Chronic kidney disease (CKD), which is more prevalent in women, and its high...

Coordinated in: Belgium

Programme: EXCELLENT SCIENCE - Marie Skłodowska-Curie Actions, Fostering new skills by means of excellent initial training of researchers

Last update: 15 January 2024

Add to my booklet

Commodity12 COntinuous Multi-parametric and Multi-layered analysis Of DIabetes TYpe 1 & 2

ID: 287841

E 10 1 20

From: 1 October 2011 to: 30 June 2015

In COMMODITY12 we will build a multi-layered multi-parametric infrastructure for continuous monitoring of diabetes type 1 and 2. The COMMODITY12 system will exploit multi-parametric data to provide healthcare workers and patients, with clinical indicators for the treatment of...

Coordinated in: Germany

Programme: Specific Programme "Cooperation": Information and communication

technologies

Last update: 1 August 2019

Add to my booklet

PROJECT PROJECT

<u>IntraopRealtimeTumor A Real-time imaging and classification system for low-grade glioma detection during brain surgery</u>

ID: 101066138

From: 1 October 2022 to: 31 March 2024

Brain tumors remain one of the most incurable illnesses we know; patients have poor prognosis and less than a decade of life expectancy. The oncologist's toolkit is rather limited as chemotherapy agents have limited access to the brain due to the blood brain barrier...

Coordinated in: Israel

Programme: European Research Council (ERC)

Last update: 17 August 2022

Add to my booklet

PROJAbout CORDIS

#### **ANNEX III**

#### AI-ENABLED SUSTAINABLE ENVIRONMENT AND ENERGY

#### RESET Restarting the Economy in Support of Environment, through Technology

ID: 101017857

From: 1 January 2021 to: 30 June 2024

Time is running out to achieve a more sustainable development. Post COVID-19 economic stimuli need to deploy a green new deal (GND) that ReSETs economic systems to create secure and meaningful employment whilst protecting nature for people, for climate change and flood...

Coordinated in: United Kingdom

Programme: EXCELLENT SCIENCE - Future and Emerging Technologies (FET), FET

Proactive

Last update: 28 December 2023

Add to my booklet

# <u>Final Report Summary - UNDERSAFE (Wireless intelligent system for environmental evaluation, safety monitoring and guidance for recreational and Ecotourism underground activities)</u>

Undersafe is a system which will provide constant, round-the-clock monitoring of environmental and other conditions in underground sites open for recreational and tourist purposes. The UnderSafe system is based on wireless technologies. The objective is to...

Project: UNDERSAFE (ID: 286176)

Programme: Specific Programme "Capacities": Research for the benefit of SMEs

Last update: 13 November 2014

Add to my booklet

# <u>Periodic Reporting for period 1 - SAFERS (Structured Approaches for Forest fire Emergencies in Resilient Societies)</u>

Forest fires are exacerbated by extreme weather conditions, which are increasing both in frequency and in magnitude due to climate change. Globally, massive fires have swept through forests and other landscapes in an alarming rate, resulting in the loss of human lives...

Project: SAFERS (ID: 869353)

Programme: Developing comprehensive and sustained global environmental observation and

information systems

Last update: 22 September 2022

Add to my booklet

# <u>Final Report Summary - KLEAN (Knowledge-based EFB for green flight trajectory decision aid)</u>

The objective of the KLEAN (Knowledge-based EFB for green flight trajectory decision aid) project has been the development of a custom knowledge-based EFB (Electronic Flight Bag) with SW packages implementing Advanced Weather Radar Post-processor (AWRP) and...

Project: KLEAN (ID: 306927)

Programme: Specific Programme "Cooperation": Joint Technology Initiatives

Last update: 29 December 2015

Add to my booklet

## CROWD4SDG Citizen Science for Monitoring Climate Impacts and Achieving Climate Resilience

ID: 872944

From: 1 May 2020 to: 30 April 2023

The 17 Sustainable Development Goals (SDGs), launched by the UN in 2015, are underpinned by 169 concrete targets and 232 measurable indicators. Some of these indicators have no established measurement methodology. For others, many countries do not have the data collection...

Coordinated in: Switzerland

Programme: Integrate society in science and innovation issues, policies and activities in order to integrate citizens' interests and values and to increase the quality, relevance, social acceptability and sustainability of research and innovation outcomes in various fields of activity from social innovation to areas such as biotechnology and nanotechnology

Last update: 18 December 2023

Add to my booklet

# <u>Final Report Summary - SMARTOPENDATA (Linked Open Data for environment protection in Smart Regions)</u>

The SmartOpenData project has completed the creation of a Linked Open Data -LOD-infrastructure extended throughout Europe. This research infrastructure has five different pilots as one of its most visible outcomes. Nevertheless, those tools and applications...

Project: **SMARTOPENDATA** (ID: 603824)

Programme: Specific Programme "Cooperation": Environment (including Climate Change)

Last update: 2 June 2016 Add to my booklet

# <u>Final ReportSummary - BOVINOSE (Pheromone-based sensor system for detecting estrus in dairy cows)</u>

In order to control the calving interval, and therefore to optimise milk production and maximise offspring in dairy cattle, artificial insemination (AI) is widely used. Currently, the conception rate of AI varies from 30 % to 70 %, and a successful insemination depends mainly ...

Project: BOVINOSE (ID: 232460)

Programme: Specific Programme "Capacities": Research for the benefit of SMEs

Last update: 17 June 2013

Add to my booklet

### Periodic Reporting for period 3 - IntelliAQ (Artificial Intelligence for Air Quality)

Status 31 May 2021Artificial Intelligence (AI) is experiencing a wave of enthusiasm, since ground-breaking results have been published on cognitive problems such as image and speech recognition, automated language translation, robotics, and strategic games. This has become...

Project: IntelliAQ (ID: 787576)

Programme: EXCELLENT SCIENCE - European Research Council (ERC)

Last update: 30 June 2023

Add to my booklet

GECKO building GrEener and more sustainable soCieties by filling the Knowledge gap in social science and engineering to enable responsible artificial intelligence co-creatiOn

ID: 955422

From: 1 January 2021 to: 31 December 2024

GECKO will focus on accountable, responsible, and transparent artificial intelligence (ART AI) to address urgent environmental needs and support the European Green Deal and AI ecosystem, ensuring that all citizens benefit from the sustainable green transition. The EC AI...

Coordinated in: Germany

Programme: EXCELLENT SCIENCE - Marie Skłodowska-Curie Actions, Fostering new

skills by means of excellent initial training of researchers

Last update: 29 January 2024

Add to my booklet

ANTARES Centre of Excellence for Advanced Technologies in Sustainable Agriculture and Food Security

ID: 739570

From: 1 March 2017 to: 28 February 2025

Agriculture is facing enormous challenges today. Not only does it have to provide enough safe and healthy food for the ever-increasing Earth's population, it is also expected to offer alternatives to fossil fuels and to protect the non-renewable resources such as soil, water...

Coordinated in: Serbia

Programme: Teaming of excellent research institutions and low performing RDI regions

Last update: 30 June 2023

Add to my booklet

NARSIS New Approach to Reactor Safety ImprovementS

ID: 755439

From: 1 September 2017 to: 28 February 2022

Probabilistic Safety Assessment (PSA) procedures allow to better understand and estimate the likelihood of the most causes prone to initiate nuclear accidents and to identify the most critical elements of the systems. However, despite of the remarkable reliability of current...

Coordinated in: France

Programme: Euratom, Support safe operation of nuclear systems

Last update: 6 February 2024

Add to my booklet

ACHIEF Innovative high performance Alloys and Coatings for HIghly Efficient intensive energy processes

ID: 958374

ID. 730374

From: 1 October 2020 to: 31 March 2024

The ACHIEF project will develop novel efficient materials-based solutions enabling to meet extreme and fluctuating conditions currently employed in Energy Intensive Industries (EII) through the utilization of an Artificial Intelligent combined Modelling approach for the design...

Coordinated in: France

Programme: Sustainable, resource-efficient and low-carbon technologies in energy-intensive process industries, INDUSTRIAL LEADERSHIP - Leadership in enabling and industrial technologies - Advanced manufacturing and processing

Last update: 5 February 2024

Add to my booklet

# TWAIN Integrated, Value-based and Multi-objective wind farm control powered by Artificial Intelligence

ID: 101122194

From: 1 November 2023 to: 31 October 2027

For reliable and affordable design and operation of wind power plants that also consider system-level stability and security as well as the surrounding natural and social environment, coordinated wind farm control (WFC) and asset management solutions play an important role...

Coordinated in: Denmark

Programme: Energy Supply, Climate, Energy and Mobility

Last update: 8 September 2023

Add to my booklet

Smart FDP Smart Digital Solution for Field Development Planning Optimization

ID: 101111369

From: 1 September 2023 to: 31 August 2025

To meet the world's energy demands specifically with "easy oil" reservoirs depleting, it is important to optimize production and field development planning (FDP). This will be even more pronounced in the years to come if pore space is to be used to store CO2 or hydrogen in...

Coordinated in: Norway

Programme: Marie Skłodowska-Curie Actions (MSCA)

Last update: 25 July 2023 Add to my booklet

NEXOGENESIS Facilitating the next generation of effective and intelligent water-related policies utilising artificial intelligence and reinforcement learning to assess the water-energy-food-ecosystem (WEFE) nexus

ID: 101003881

From: 1 September 2021 to: 31 August 2025

Water, energy, food, and ecosystems (WEFE) are interconnected, comprising a coherent system (nexus) dominated by complexity and modulated by climatic and socio-economic drivers. Resource constraints, and their interconnectedness could hamper economic development, including...

Coordinated in: Netherlands

Programme: <u>SOCIETAL CHALLENGES - Climate action</u>, <u>Environment</u>, <u>Resource Efficiency and Raw Materials</u>, <u>Fighting and adapting to climate change</u>, <u>Protection of the environment</u>, <u>sustainable management of natural resources</u>, <u>water</u>, <u>biodiversity and ecosystems</u>

Last update: 30 January 2024

Add to my booklet

### AHEAD TowArd sustainable foresigHt capabilitiEs for increAseD Civil Security

ID: 101121338

From: 1 September 2023 to: 28 February 2026

With the rise of potentially disruptive technologies such as artificial intelligence and virtual reality, a particular challenge has emerged for LEAs and other civil security practitioners. Tasked with fostering safe societies and protecting European citizens from new forms...

Coordinated in: France

Programme: Disaster-Resilient Societies, Protection and Security, Civil Security for Society

Last update: 22 September 2023

# FEROX Fostering and Enabling AI, Data and Robotics Technologies for Supporting Human Workers in Harvesting Wild Food

ID: 101070440

From: 1 September 2022 to: 31 August 2025

Wild berries and mushrooms are considered to be a national treasure of Nordic countries. These food products require zero resources to cultivate as they grow naturally in the forests. It is estimated that less than 10% of the total annual wild berry crop is harvested from the...

Coordinated in: Italy

Programme: Digital, Industry and Space, Artificial Intelligence and Robotics

Last update: 23 August 2022

Add to my booklet

SMART5GRID Smart5Grid - Demonstration of 5G solutions for SMART energy GRIDs of the future

ID: 101016912

From: 1 January 2021 to: 30 April 2024

5G is envisioned to be the first global technology standard that will address the variety of future use cases of the energy sector, by ensuring that both the radio and core network performance requirements can be met in terms of end-to-end latency, reliability and...

Coordinated in: Italy

Programme: INDUSTRIAL LEADERSHIP - Leadership in enabling and industrial

technologies - Information and Communication Technologies (ICT)

Last update: 5 February 2024

Add to my booklet

# BioDT Biodiversity Digital Twin for Advanced Modelling, Simulation and Prediction Capabilities

ID: 101057437

From: 1 June 2022 to: 31 May 2025

With our planet facing an increasing reduction in biodiversity, it is of the utmost importance to understand the way climate, humans, pollution and other factors affect biodiversity. This need is urgent since biodiversity loss directly impacts our ability as humans to live...

Coordinated in: Finland

Programme: Research infrastructures, The innovation potential of European Research Infrastructures and activities for Innovation and Training

Last update: 4 May 2023 Add to my booklet

### HiDALGO HPC and Big Data Technologies for Global Systems

ID: 824115

From: 1 December 2018 to: 28 February 2022

Developing evidence and understanding concerning Global Challenges and their underlying parameters is rapidly becoming a vital challenge for modern societies. Various examples, such as health care, the transition of green technologies or the evolution of the global climate up...

Coordinated in: Spain

Programme: <u>Development</u>, <u>deployment</u> and <u>operation</u> of <u>ICT-based e-infrastructures</u>, <u>EXCELLENT SCIENCE - Research Infrastructures</u>

Last update: 7 September 2023

Add to my booklet

### BIM-SPEED Harmonised Building Information Speedway for Energy-Efficient Renovation

ID: 820553

From: 1 November 2018 to: 31 October 2022

'BIM for renovation of existing residential building stock' has been proven viable in innovative pilot projects by the members of BIM-SPEED consortium, among others in H2020 Smart Cities. The mission of BIM-SPEED is to take 'BIM for renovation' to a deep renovation...

Coordinated in: Germany

Programme: <u>Technologies enabling energy-efficient systems and energy-efficient buildings</u> with a low environmental impact, <u>INDUSTRIAL LEADERSHIP - Leadership in enabling and</u> industrial technologies - Advanced manufacturing and processing

Last update: 30 November 2023

Add to my booklet

# NEANIAS Novel EOSC services for Emerging Atmosphere, Underwater and Space Challenges

ID: 863448

From: 1 November 2019 to: 31 October 2022

NEANIAS is an ambitious project that comprehensively addresses the 'Prototyping New Innovative Services' challenge set out in the recent 'Roadmap for EOSC' foreseen actions. NEANIAS will drive the co-design, delivery, and integration into EOSC of innovative thematic...

Coordinated in: Greece

Programme: <u>Development</u>, <u>deployment</u> and <u>operation</u> of ICT-based e-<u>infrastructures</u>, <u>EXCELLENT SCIENCE</u> - <u>Research Infrastructures</u>

Last update: 18 January 2024

Add to my booklet

# INTCATCH Development and application of Novel, Integrated Tools for monitoring and managing Catchments

ID: 689341

From: 1 June 2016 to: 31 January 2020

INTCATCH will instigate a paradigm shift in the monitoring and management of surface water quality that is fit for global waters in the period 2020-2050. INTCATCH will do this by developing efficient, user-friendly water monitoring strategies and systems based on innovative...

Coordinated in: United Kingdom

Programme: SOCIETAL CHALLENGES - Climate action, Environment, Resource
Efficiency and Raw Materials Enabling the transition towards a green economy and so

Efficiency and Raw Materials, Enabling the transition towards a green economy and society through eco-innovation

Last update: 17 August 2022

Add to my booklet

# RELIANCE REsearch LIfecycle mAnagemeNt for Earth Science Communities and CopErnicus users in EOSC

ID: 101017501

From: 1 January 2021 to: 30 June 2023

RELIANCE will extend the EOSC service offering with a set of industry-strong, innovative, interconnected services for the open, efficient, and cross-disciplinary management of the

research lifecycle. In accordance with FAIR and Open Science principles, it will adopt a holistic...

Coordinated in: Poland

Programme: <u>Development</u>, <u>deployment and operation of ICT-based e-infrastructures</u>, <u>EXCELLENT SCIENCE - Research Infrastructures</u>

Last update: 30 January 2024

Add to my booklet

### sustAGE Smart environments for person-centered sustainable work and well-being

ID: 826506

From: 1 January 2019 to: 30 June 2022

"sustAGE aims to develop a person-centered solution for promoting the concept of ""sustainable work"" for EU industries. The project provides a paradigm shift in human machine interaction, building upon seven strategic technology trends, IoT, Machine learning, micro-moments...

Coordinated in: Greece

Programme: <u>SOCIETAL CHALLENGES - Health, demographic change and wellbeing</u>, <u>Active ageing</u>, independent and assisted living, <u>Individual awareness and</u> empowerment for self-management of health

Last update: 28 December 2022

Add to my booklet

Water-Futures Smart Water Futures: designing the next generation of urban drinking water systems

ID: 951424

From: 1 August 2021 to: 31 July 2027

The world population living in urban settlements is expected to increase to 70% of 9.7 billion by 2050. Historically, as cities grew, new water infrastructures followed as needed. However, these developments had less to do with real planning than with reacting to crisis...

Coordinated in: Cyprus

Programme: EXCELLENT SCIENCE - European Research Council (ERC)

Last update: 30 January 2024

Add to my booklet

# SHIP2FAIR Solar Heat for Industrial Process towards Food and Agro Industries Commitment in Renewables

ID: 792276

From: 1 April 2018 to: 30 June 2023

SHIP2FAIR aims to foster the integration of solar heat in industrial processes (SHIP) from the agro—food sector, by developing and demonstrating a set of tools and methods for the development of industrial solar heat projects during its whole life-cycle. Thus, the project...

Coordinated in: Spain

Programme: SOCIETAL CHALLENGES - Secure, clean and efficient energy, Low-cost,

<u>low-carbon energy supply</u> Last update: 1 February 2024

Add to my booklet

BioMedaqu Aquaculture meets Biomedicine: Innovation in Skeletal Health research.

ID: 766347

From: 1 August 2018 to: 31 January 2023

Skeletal anomalies in farmed fish are a continuous problem for global aquaculture, affecting fish welfare, performance, and product quality. Aquaculture research has made considerable progress in reducing the incidence of deformities, but new species, intensified production...

Coordinated in: Belgium

Programme: EXCELLENT SCIENCE - Marie Skłodowska-Curie Actions, Fostering new

skills by means of excellent initial training of researchers

Last update: 1 February 2024

Add to my booklet

### CHARTER Drivers and Feedbacks of Changes in Arctic Terrestrial Biodiversity

ID: 869471

From: 1 August 2020 to: 31 January 2025

CHARTER aims to advance state-of-the-art (SOTA) knowledge on Arctic biodiversity change and social-ecological systems (SES) on four critical fronts: i) Feedbacks: To understand transitions in vegetation cover, energy balance and cryospheric change at centennial, decadal, and...

Coordinated in: Finland

Programme: SOCIETAL CHALLENGES - Climate action, Environment, Resource

Efficiency and Raw Materials, Fighting and adapting to climate change

Last update: 19 January 2024

Add to my booklet

DRAGON Data Driven Precision Agriculture Services and Skill Acquisition

ID: 810775

From: 1 October 2018 to: 31 January 2022

"Precision Agriculture (PA) is an evolving farming management strategy using digital technologies & techniques to monitor and optimise agricultural production processes. PA methods, harnessing data streams from satellites, mobile phones, Internet of Things (IoT) and...

Coordinated in: Serbia

Programme: Twinning of research institutions

Last update: 11 October 2022

Add to my booklet

#### Tech4Biowaste A dynamic database of relevant technologies of bio-waste utilisation

ID: 101023200

From: 1 April 2021 to: 31 March 2023

"Bio-waste is a key waste stream in Europe with a high potential for contributing to a more circular economy. The Tech4Biowaste project will pave the way for deployment of bio-waste technologies and technology configurations by setting-up a database providing a comprehensive...

Coordinated in: Netherlands

Programme: INDUSTRIAL LEADERSHIP - Leadership in enabling and industrial technologies — Biotechnology, SOCIETAL CHALLENGES - Food security, sustainable agriculture and forestry, marine, maritime and inland water research, and the

bioeconomy, Bio-based Industries Joint Technology Initiative (BBI-JTI)

Last update: 14 November 2023

Add to my booklet

FLEXGRID A novel smart grid architecture that facilitates high RES penetration through innovative markets towards efficient interaction between advanced electricity grid management and intelligent stakeholders

ID: 863876

From: 1 October 2019 to: 30 September 2022

Future smart grids require the effective interaction between energy markets and electricity grid management systems in order to introduce new services and mitigate risks introduced by high RES penetration. FLEXGRID envisages the orchestration and integration of: i) advanced...

Coordinated in: Greece

Programme: SOCIETAL CHALLENGES - Secure, clean and efficient energy, A single,

smart European electricity grid Last update: 7 May 2023 Add to my booklet

EXCITE2 Enhanced X(cross)-disciplinary Community-driven Imaging Technologies for Earth and Environmental material research

ID: 101131765

From: 1 April 2024 to: 31 March 2028

The EXCITE<sup>2</sup> Network is revolutionizing Earth and environmental material science research by consolidating a critical mass of 18 research facilities in 12 European and associated partner countries into a unified infrastructure and providing transnational access to advanced...

Coordinated in: Netherlands

Programme: Research infrastructures, Opening, Integrating and Interconnecting Research

<u>Infrastructures</u>

Last update: 3 November 2023

Add to my booklet

### DT-GEO A Digital Twin for GEOphysical extremes

ID: 101058129

From: 1 September 2022 to: 31 August 2025

With present computational capabilities and data volumes entering the Exascale Era, digital twins of the Earth system will be able to mimic the different system components (atmosphere, ocean, land, lithosphere) with unrivaled precision, providing analyses, forecasts, and what...

Coordinated in: Spain

Programme: Research infrastructures, The innovation potential of European Research Infrastructures and activities for Innovation and Training

Last update: 14 September 2022

Add to my booklet

### LEWIS Landslide early-warning integrated system

ID: EVG1-CT-2001-00055

From: 1 March 2002 to: 31 August 2005

The LEWIS project develops a new integrated Earth Observation (EO) approach for producing landslide-warning maps. It first uses the analysis of historical multi-source satellite data for the detection of surface feature changes related to causative and triggering mechanisms th...

Coordinated in: Italy

Programme: Programme for research, technological development and demonstration on

"Energy, environment and sustainable development, 1998-2002"

Last update: 9 December 2005

Add to my booklet

PLASCAT Plasma-assisted catalysis for the removal of volatile organic compounds from waste gas stream

ID: 7801

From: 1 October 2005 to: 30 September 2007

The purpose of this project is to investigate the effectiveness of the novel hybrid technology of plasma-assisted catalysis as a means for environmental clean-up of polluted, waste gaseous emissions and to gain a fundamental understanding of the synergistic effects that result...

Coordinated in: United Kingdom

Programme: <u>Human resources and Mobility in the specific programme for research, technological development and demonstration "Structuring the European Research Area"</u> under the Sixth Framework Programme 2002-2006

Last update: 10 March 2023

Add to my booklet

NanoSolveIT Innovative Nanoinformatics models and tools: towards a Solid, verified and Integrated Approach to Predictive (eco)Toxicology (NanoSolveIT)

ID: 814572

From: 1 January 2019 to: 31 August 2023

NanoSolveIT will introduce a ground-breaking in silico Integrated Approach to Testing and Assessment (IATA) for the environmental health and safety of Nanomaterials (NM), implemented as a decision support system packaged as a standalone open software and a Cloud platform...

Coordinated in: Cyprus

Programme: <u>INDUSTRIAL LEADERSHIP - Leadership in enabling and industrial</u> technologies - Advanced materials, <u>INDUSTRIAL LEADERSHIP - Leadership in enabling</u> and industrial technologies - Nanotechnologies

Last update: 14 November 2023

Add to my booklet

REXUS MANAGING RESILIENT NEXUS SYSTEMS THROUGH PARTICIPATORY SYSTEMS DYNAMICS MODELLING

ID: 101003632

From: 1 May 2021 to: 30 April 2024

REXUS ambitious goal is to bring transformative change in the way our societies approach the Water Food Energy Climate Nexus. The project argues that this is possible only through the activation of inclusive nexus partnerships, the Learning & Action Alliances (LAAs).

The...

Coordinated in: Spain

Programme: <u>SOCIETAL CHALLENGES - Climate action, Environment, Resource</u> <u>Efficiency and Raw Materials, Fighting and adapting to climate change, Protection of the environment, sustainable management of natural resources, water, biodiversity and ecosystems</u>

Last update: 27 December 2023

Add to my booklet

RISE Real-time Earthquake Risk Reduction for a Resilient Europe

ID: 821115

From: 1 September 2019 to: 31 May 2023

The key concept and vision of RISE is to promote a paradigm shift in how earthquake risk is perceived and managed. We believe that by taking advantage of advances in scientific

understanding, and dramatically changing technological capabilities, earthquake hazard and risk will...

Coordinated in: Switzerland

Programme: Provide knowledge and tools for effective decision making and public engagement, SOCIETAL CHALLENGES - Climate action, Environment, Resource

Efficiency and Raw Materials
Last update: 1 February 2024

Add to my booklet

INSHIP Integrating National Research Agendas on Solar Heat for Industrial Processes

ID: 731287

From: 1 January 2017 to: 31 December 2020

Despite process heat is recognized as the application with highest potential among solar heating and cooling applications, Solar Heat for Industrial Processes (SHIP) still presents a modest share of about 0.3% of total installed solar thermal capacity. As of today's...

Coordinated in: Germany

Programme: <u>SOCIETAL CHALLENGES - Secure</u>, clean and efficient energy, <u>New knowledge and technologies</u>, <u>Low-cost</u>, <u>low-carbon energy supply</u>, <u>Alternative fuels and mobile energy sources</u>, A single, smart European electricity grid

Last update: 23 August 2022

Add to my booklet

MANGO MANGO: exploring Manycore Architectures for Next-Generation HPC systems

ID: 671668

From: 1 October 2015 to: 31 March 2019

MANGO targets to achieve extreme resource efficiency in future QoS-sensitive HPC through ambitious cross-boundary architecture exploration for performance/power/predictability (PPP) based on the definition of new-generation high-performance, power-efficient, heterogeneous...

Coordinated in: Spain

Programme: EXCELLENT SCIENCE - Future and Emerging Technologies (FET), FET

**Proactive** 

Last update: 7 September 2023

Add to my booklet

SCORPION Cost effective robots for smart precision spraying

ID: 101004085

From: 1 January 2021 to: 31 December 2023

Spraying in agriculture represents a societal challenge due to its negative impact in human and animal health and in environment. Increasing spraying efficiency towards the objective of "right time, right amount, right place", involves reduction of losses and...

Coordinated in: Portugal

Programme: INDUSTRIAL LEADERSHIP - Leadership in enabling and industrial

technologies – Space, Enabling exploitation of space data

Last update: 15 January 2024

Add to my booklet

STORM Self-organising Thermal Operational Resource Management

ID: 649743

From: 1 March 2015 to: 31 March 2019

In STORM a generic district heating and cooling (DHC) network controller will be development and demonstration, with the ambition to increase the use of waste heat and renewable energy sources in the DHC network. The general applicability will be guaranteed by the following...

Coordinated in: Belgium

Programme: SOCIETAL CHALLENGES - Secure, clean and efficient energy, Reducing

energy consumption and carbon foorpint by smart and sustainable use

Last update: 15 August 2022

Add to my booklet

YADES Improved Resilience and Sustainable Reconstruction of Cultural Heritage Areas to cope with Climate Change and Other Hazards based on Innovative Algorithms and Modelling Tools

ID: 872931

From: 1 April 2020 to: 31 March 2025

YADES aims to efficiently train a network of fellows on the field of the resilience of Cultural Heritage (CH) areas and historic cities against Climate Change (CC) and other types of hazards. Towards this direction, YADES aims to introduce a research framework for downscaling...

Coordinated in: Greece

Programme: EXCELLENT SCIENCE - Marie Skłodowska-Curie Actions, Stimulating

innovation by means of cross-fertilisation of knowledge

Last update: 5 February 2024

Add to my booklet

<u>TURNkey Towards more Earthquake-resilient Urban Societies through a Multi-sensor-based Information System enabling Earthquake Forecasting, Early Warning and Rapid Response actions</u>

ID: 821046

From: 1 June 2019 to: 31 May 2022

TURNkey aims to make significant advances in the fields of Operational Earthquake Forecasting (OEF), Earthquake Early Warning (EEW) and the Rapid Response to Earthquakes (RRE), particularly when applying these systems in practice in Europe. The project will develop a flexible...

Coordinated in: Norway

Programme: Provide knowledge and tools for effective decision making and public engagement, SOCIETAL CHALLENGES - Climate action, Environment, Resource

Efficiency and Raw Materials Last update: 9 December 2022

Add to my booklet

SABER CULTURAL SAfeguarding Biodiversity and Ecosystem seRvices by integrating CULTURAL values in freshwater management: learning from Māori

ID: 748625

From: 1 January 2018 to: 31 December 2020

Freshwater ecosystems are essential to people's economic, cultural and social wellbeing, yet are still one of the most seriously threatened ecosystems on the planet. This conflict is reflected in political regulations that ask to halt the loss of, restore and safeguard...

Coordinated in: Spain

Programme: EXCELLENT SCIENCE - Marie Skłodowska-Curie Actions, Nurturing

excellence by means of cross-border and cross-sector mobility

Last update: 28 August 2022

Add to my booklet

CoEvolFramework Unified Framework for the Analysis of Co-evolutionary Systems

ID: 657027

From: 1 February 2016 to: 31 January 2018

Today's challenges are marked by more frequent and wide-spread episodes of social, economic, political and environmental crisis. Co-evolutionary systems offer a natural perspective and powerful tools to help us understand conditions that affect populations of agents whose...

Coordinated in: United Kingdom

Programme: EXCELLENT SCIENCE - Marie Skłodowska-Curie Actions, Nurturing

excellence by means of cross-border and cross-sector mobility

Last update: 8 August 2022

Add to my booklet

DCNextEve LV DC microgrids for evolved energy communities

ID: 708844

From: 1 July 2016 to: 15 October 2018

Microgrids are an important concept in the emerging power industry field. They are widely recognized as an innovative eco-system when it comes to a flexible and reliable option for the integration of distributed energy renewable resources (DER). The research on direct current...

Coordinated in: Romania

Programme: EXCELLENT SCIENCE - Marie Skłodowska-Curie Actions, Nurturing

excellence by means of cross-border and cross-sector mobility

Last update: 9 August 2022

Add to my booklet

SAFE4ALL Safeguarding African Foodsheds and Ecosystems for all Actors across Local, regional and international Levels to manage migration

ID: 101137814

From: 1 January 2024 to: 31 December 2027

Agriculture is the foundation of the livelihoods of billions of people worldwide, including African rural and urban households, farming communities, and cities. However, weather and climate risks have increased, creating a need for better access to climate and weather...

Coordinated in: Netherlands

Programme: Climate, Energy and Mobility, Climate Science and Solutions

Last update: 11 December 2023

Add to my booklet

Advancing satellite data integration for improved earth observation outcomes

Project: CALLISTO (ID: 101004152)

Programme: INDUSTRIAL LEADERSHIP - Leadership in enabling and industrial

<u>technologies – Space</u> Available languages: DEENESFRITPL

Last update: 10 May 2021

Final Report Summary - FOODINTEGRITY (Ensuring the Integrity of the European food

chain)

FoodIntegrity is a 5 year, interdisciplinary project funded under Framework 7, that aimed to assure the integrity of our food. The project comprised 60 participants from EU Member States, China and Argentina. FoodIntegrity was commissioned in 2014 against the background of...

Project: FOODINTEGRITY (ID: 613688)

Programme: Specific Programme "Cooperation": Food, Agriculture and Biotechnology

Last update: 3 July 2019 Add to my booklet

## <u>CROWD4SDG Citizen Science for Monitoring Climate Impacts and Achieving Climate</u> Resilience

ID: 872944

From: 1 May 2020 to: 30 April 2023

The 17 Sustainable Development Goals (SDGs), launched by the UN in 2015, are underpinned by 169 concrete targets and 232 measurable indicators. Some of these indicators have no established measurement methodology. For others, many countries do not have the data collection...

Coordinated in: Switzerland

Programme: Integrate society in science and innovation issues, policies and activities in order to integrate citizens' interests and values and to increase the quality, relevance, social acceptability and sustainability of research and innovation outcomes in various fields of activity from social innovation to areas such as biotechnology and nanotechnology

Last update: 18 December 2023

Add to my booklet

# Final Report Summary - SODSAT (Remote precision management of turf grass sod production by means of artificial intelligence and satellite imaging)

Sod or Turf Grass as it is more commonly known, is used extensively in sports and landscaping projects. Although natural sod has been replaced with synthetic turf in some cases, turf grass still is still the choice for many sports and landscaping projects. Just like any...

Project: SODSAT (ID: 605729)

Programme: Specific Programme "Capacities": Research for the benefit of SMEs

Last update: 12 August 2016

Add to my booklet

# ADAPT Adaptive Decision support for Agents negotiation in electricity market and smart grid Power Transactions

ID: 703689

From: 1 January 2017 to: 31 December 2018

ADAPT explores the theme of decision support for agents negotiations in the complementary environments of electricity markets and smart grids. The EU priority of increasing the penetration of renewable energy sources in the power system has led to the wide acceptance of the...

Coordinated in: Spain

Programme: EXCELLENT SCIENCE - Marie Skłodowska-Curie Actions, Nurturing

excellence by means of cross-border and cross-sector mobility

Last update: 11 August 2022

Add to my booklet

# <u>Final Report Summary - CROPS (Intelligent sensing and manipulation for sustainable production and harvesting of high value crops, clever robots for crops)</u>

The following results were obtained in the CROPS project. For the robotic middleware ROS was chosen as software framework. The supervisory control system as well as the high-level software architecture have been developed and tested. The design and...

Project: CROPS (ID: 246252)

Programme: Specific Programme "Cooperation": Nanosciences, Nanotechnologies, Materials

and new Production Technologies
Last update: 29 December 2015

Add to my booklet

<u>Periodic Reporting for period 1 - EnergySequence (Building data scientist to help us dive</u> deep into the very large amount structured time series data pertaining to building energy use)

Nearly 40% of final energy consumption and 36% of greenhouse gas emissions are produced by buildings. The actual process of improving building energy efficiency is time-consuming and cost intensive. Energy experts spend a lot of time walking around buildings, collecting...

Project: EnergySequence (ID: 739834)

Programme: INDUSTRIAL LEADERSHIP - Innovation In SMEs

Last update: 26 February 2021

Add to my booklet

### SYNTHESYS PLUS Synthesis of systematic resources

ID: 823827

From: 1 February 2019 to: 31 July 2023

European natural history collections are a critical infrastructure for meeting the most important challenge humans face over the next 30 years — mapping a sustainable future for ourselves and the natural systems on which we depend — and for answering fundamental scientific...

Coordinated in: United Kingdom

Programme: Integrating and opening existing national and regional research infrastructures of

European interest, EXCELLENT SCIENCE - Research Infrastructures

Last update: 1 February 2024

Add to my booklet

ACTION Participatory science toolkit against pollution

ID: 824603

From: 1 February 2019 to: 31 January 2022

ACTION will transform the way we do citizen science (CS) today: from a mostly scientist-led process to a more participatory, inclusive, citizen-led one, which acknowledges the diversity of the CS landscape and of the challenges CS teams have to meet as their project evolves...

Coordinated in: United Kingdom

Programme: Integrate society in science and innovation issues, policies and activities in order to integrate citizens' interests and values and to increase the quality, relevance, social acceptability and sustainability of research and innovation outcomes in various fields of activity from social innovation to areas such as biotechnology and nanotechnology

Last update: 7 October 2022

Add to my booklet

HEROES Hybrid Eco Responsible Optimized European Solution

ID: 956874

From: 1 March 2021 to: 28 February 2023

Bridging the gap between HPC and IA/ML user communities and HPC Resources is key to unleash Europe's innovation potential. A lot of effort is done to build the European technologies able to deliver centralised, petascale/exascale HPC & ML. It is equally important to make...

Coordinated in: France

Programme: INDUSTRIAL LEADERSHIP - Leadership in enabling and industrial technologies - Information and Communication Technologies (ICT), Next generation computing: Advanced and secure computing systems and technologies, including cloud

computing

Last update: 16 September 2022

Add to my booklet

# <u>ReTraCE Realising the Transition to the Circular Economy: Models, Methods and Applications</u>

ID: 814247

From: 1 November 2018 to: 30 April 2023

This network brings together an exceptionally strong team of world-leading experts from a wide set of beneficiaries and partners in order to achieve breakthroughs in understanding how the transition towards a Circular Economy (CE) can be realised in a successful way in the...

Coordinated in: United Kingdom

Programme: <u>EXCELLENT SCIENCE - Marie Skłodowska-Curie Actions</u>, <u>Fostering new</u> skills by means of excellent initial training of researchers

Last update: 30 November 2023

Add to my booklet

# ARAGORN Adaptive Reconfigurable Access and Generic interfaces for Optimisation in Radio Networks

ID: 216856

From: 1 January 2008 to: 30 August 2010

The primary aim of the ARAGORN project is to research and develop a Cognitive Resource Manager (CRM) that aims to ensure that efficient use is made of both node-local and shared resources in a collaborative wireless system. These include, for example, local energy consumption...

Coordinated in: Germany

Programme: Specific Programme "Cooperation": Information and communication

technologies

Last update: 16 July 2019 Add to my booklet

### <u>PROVIDE Paris Agreement Overshooting – Reversibility, Climate Impacts and Adaptation</u> Needs

ID: 101003687

From: 1 September 2021 to: 31 August 2024

Overshooting the Paris Agreement temperature thresholds is a distinct possibility. The impacts of such overshoot scenarios would materialise globally, but be particularly consequential for vulnerable regions and systems for which thresholds of abrupt and possibly irreversible...

Coordinated in: Germany

Programme: SOCIETAL CHALLENGES - Climate action, Environment, Resource

Efficiency and Raw Materials, Fighting and adapting to climate change

Last update: 24 January 2024

Add to my booklet

### SecureGas Securing The European Gas Network

ID: 833017

From: 1 June 2019 to: 30 November 2021

SecureGas focuses on the 140.000Km of the European Gas network covering the entire value chain from Production to Distribution to the users, providing methodologies, tools and guidelines to secure existing and incoming installations and make them resilient to cyber-physical...

physical...

Coordinated in: Italy

Programme: <u>Improve cyber security</u>, <u>Secure societies - Protecting freedom and security of Europe and its citizens</u>, <u>Protect and improve the resilience of critical infrastructures</u>, <u>supply</u> chains and tranport modes

Last update: 29 July 2022 Add to my booklet

### IPM Decisions Stepping-up IPM decision support for crop protection

ID: 817617

From: 1 June 2019 to: 31 May 2024

The 'IPM Decisions' project proposed here will accelerate impact from farm Decision Support Systems (DSS) for IPM, as advocated in the Sustainable Use Directive. The impact of DSS in crop protection has been constrained by regional and sectoral fragmentation of actors

Coordinated in: United Kingdom

Programme: Increasing production efficiency and coping with climate change, while ensuring sustainability and resilience, SOCIETAL CHALLENGES - Food security, sustainable agriculture and forestry, marine, maritime and inland water research, and the bioeconomy

Last update: 19 December 2023

Add to my booklet

### TEMA Trusted Extremely Precise Mapping and Prediction for Emergency Management

ID: 101093003

From: 1 December 2022 to: 30 November 2026

TEMA will greatly improve Natural Disaster Management (NDM, e.g., for wildfires, floods) by automating precise semantic 3D mapping and disaster evolution prediction to achieve NDM goals in near-real-time. It will analyze and fuse many heterogeneous extreme data sources: smart...

Coordinated in: Greece

Programme: Digital, Industry and Space, Advanced Computing and Big Data

Last update: 10 March 2023

Add to my booklet

### ADMIRAL Advanced multimodal marketplace for low emission and energy transportation

ID: 101104163

From: 1 May 2023 to: 30 April 2026

Freight transportation is responsible for large share of total GHG emissions in Europe. So far, majority of companies have concentrated on their primary emissions and those caused by their energy use, while indirect emissions from e.g. logistics services have received limited...

Coordinated in: Finland

Programme: Clean, Safe and Accessible Transport and Mobility, Climate, Energy and

Mobility, Smart Mobility
Last update: 13 July 2023
Add to my booklet

Morse Model-based optimisation for efficient use of resources and energy

ID: 768652

From: 1 October 2017 to: 28 February 2022

The process industry is continuously looking for new ways to improve resource efficiency due to high dependence on resources (energy, raw materials and utilities). In large scale production even small changes in using raw materials and in energy can significantly improve...

Coordinated in: Finland

Programme: Sustainable, resource-efficient and low-carbon technologies in energy-intensive process industries, INDUSTRIAL LEADERSHIP - Leadership in enabling and industrial technologies - Advanced manufacturing and processing

Last update: 9 November 2022

Add to my booklet

NATALIE Accelerating and mainstreaming transformative NATure-bAsed solutions to enhance resiLIEence to climate change for diverse bio-geographical European regions

ID: 101112859

From: 1 September 2023 to: 31 August 2028

NATALIE addresses the risks posed by climate change and its impacts and proposes to advance the concepts of "ecosystem-based adaptation" in Europe combined with climate resilient development pathways, as the means for impact driven Nature-Based Solutions (NBS), to...

Coordinated in: France

Programme: <u>Culture, creativity and inclusive society, Digital, Industry and Space, Civil Security for Society, Climate, Energy and Mobility, Food, Bioeconomy Natural Resources, Agriculture and Environment</u>

Last update: 5 June 2023
Add to my booklet

### SALSA Small farms, small food businesses and sustainable food security

ID: 677363

From: 1 April 2016 to: 31 July 2020

SALSA will assess the role of small farms and small food businesses in delivering a sustainable and secure supply of affordable, nutritious and culturally adequate food. SALSA will identify the mechanisms which, at different scales, can strengthen the role of small farms in...

Coordinated in: Portugal

Programme: SOCIETAL CHALLENGES - Food security, sustainable agriculture and

forestry, marine, maritime and inland water research, and the bioeconomy

Last update: 22 August 2022

#### PROJECT

#### PROGRAMME

# DiverSea INTEGRATED OBSERVATION, MONITORING AND PREDICTION ARCHITECTURE FOR FUNCTIONAL BIODIVERSITY OF COASTAL SEAS

ID: 101082004

From: 1 September 2023 to: 31 August 2027

DiverSea develops novel marine observation and monitoring technology by combining: 1a) The new DNA-based identification approach "DNA-marks": This approach will harnesses low coverage/cost genomic data to document genetic diversity and discriminate beyond species, to the...

Coordinated in: Norway

Programme: Seas, Oceans and Inland Waters, Food, Bioeconomy Natural Resources,

Agriculture and Environment Last update: 28 August 2023

Add to my booklet

### BigDataGrapes Big Data to Enable Global Disruption of the Grapevine-powered Industries

ID: 780751

From: 1 January 2018 to: 31 December 2020

Big data is becoming a hype that is going to completely redefine industries within very traditional sectors like agriculture, food and beauty. The emergence of niche big data companies like Enolytics ("bringing big data insights to the wine industry") is threatening to...

Coordinated in: Greece

Programme: INDUSTRIAL LEADERSHIP - Leadership in enabling and industrial

technologies - Information and Communication Technologies (ICT)

Last update: 10 March 2023

Add to my booklet

# SCARBOn SCARBO next step - Space CARBon Observatory's solution to improve monitoring of GHG emissions and help establishing reliable data for emission trends forecasts

ID: 101135301

From: 1 January 2024 to: 30 June 2026

SCARBOn (Space CARbon Observatory Next step) is the continuation of the Horizon 2020 SCARBO project. This multidisciplinary project is carried out by a gender-diverse team, through a consortium including the space industry, SMEs and scientific institutes. It is led from...

Coordinated in: France

Programme: Space, including Earth Observation, Digital, Industry and Space

Last update: 8 January 2024

Add to my booklet

### RoBUTCHER A Robust, Flexible and Scalable Cognitive Robotics Platform

ID: 871631

From: 1 January 2020 to: 30 June 2023

Uptake of advanced robotics and automation in the Agri-Food sector, specifically in meat processing, has been stifled due to the perceived high cost as well as the lack of flexibility, robustness and scalability to suit different volumes, smaller in particular. This conflicts...

Coordinated in: Norway

Programme: INDUSTRIAL LEADERSHIP - Leadership in enabling and industrial

technologies - Information and Communication Technologies (ICT)

Last update: 14 September 2023

Add to my booklet

# <u>SMARTLAGOON Innovative modelling approaches for predicting Socio-environMentAl</u> evolution in highly anthRopized coasTal LAGOONs

ID: 101017861

From: 1 January 2021 to: 31 December 2024

Coastal lagoons are ecosystems with great environmental and socioeconomic value. However, these natural systems are especially vulnerable to climatic and anthropogenic pressures, such as intensive agriculture and extensive urbanization as a consequence of the tourist...

Coordinated in: Spain

Programme: EXCELLENT SCIENCE - Future and Emerging Technologies (FET), FET

**Proactive** 

Last update: 14 November 2023

Add to my booklet

### ELIAS European Lighthouse of AI for Sustainability

ID: 101120237

From: 1 September 2023 to: 31 August 2027

We live in a crucial historical moment, with tremendous challenges ahead, from climate change to the energy crisis. ELIAS emerges from the belief that AI will be a key discipline to help us tackle these challenges. At the same time, the development of AI entails deep ethical...

Coordinated in: Italy

Programme: Digital, Industry and Space, Artificial Intelligence and Robotics

Last update: 18 September 2023

Add to my booklet

# FindingPheno Unified computational solutions to disentangle biological interactions in multiomics data

ID: 952914

From: 1 March 2021 to: 28 February 2025

Animal and plant microbiome functions can be modulated, and thereby optimized, for sustainable food production. However, the outcome, i.e., the microbial response, can vary greatly depending on (e.g.)Animal and plant microbiome functions can be modulated, and thereby...

Coordinated in: Denmark

Programme: INDUSTRIAL LEADERSHIP - Leadership in enabling and industrial

<u>technologies – Biotechnology</u> Last update: 24 November 2023

Add to my booklet

# <u>ELECTRO-POM From discovery to scale up of cluster based electrolytes for Ultra-high</u> energy storage flow batteries

ID: 790458

From: 1 March 2018 to: 31 August 2019

Large scale energy storage demands are set to increase dramatically during the next years due to the expansion of renewables. One of the most promising large-scale electrical storage technologies are Redox Flow Battery (RFB) systems, which can convert electrical energy to...

Coordinated in: United Kingdom

Programme: EXCELLENT SCIENCE - European Research Council (ERC)

Last update: 15 August 2022

Add to my booklet

SNUG Innovative methodology based in circular economy and artificial intelligence to foster the transition to Sustainable and very high eNergy performance bUildinGs at a cost optimal level

ID: 101123150

From: 1 November 2023 to: 30 April 2027

Buildings are responsible for over 40% of the energy consumption and CO2 emissions in EU. Accordingly, The CE has stablished ambitious building standard aiming to transform all existing buildings into ZEBs by 2050 to reach a fully decarbonised building stock.SNUG aims to...

Coordinated in: Spain

Programme: Climate, Energy and Mobility, Buildings and Industrial Facilities in Energy

Transition

Last update: 7 November 2023

Add to my booklet

<u>LiNaBioFluid Laser-induced Nanostructures as Biomimetic Model of Fluid Transport in the Integument of Animals</u>

ID: 665337

From: 1 July 2015 to: 30 June 2018

The integument of an animal body has various functions, which are often achieved by specific micro- and/or nano- hierarchical structures. Examples are the very low water friction and air retention of water spiders or the swim fern of salvinia and the outstanding adhesion...

Coordinated in: Greece

Programme: EXCELLENT SCIENCE - Future and Emerging Technologies (FET), FET Open

Last update: 25 October 2023

Add to my booklet

E-MUSE Complex microbial ecosystems multiscale modelling: mechanistic and data driven approaches integration.

ID: 956126

From: 1 January 2021 to: 30 June 2025

European dairy industry is an important agri-food sector; it represents more than 300,000 jobs and 10 billion € positive trade balance. Five out of the ten top global dairy companies are European and more than 80% of European companies are SMEs. More than 300 cheeses and...

Coordinated in: France

Programme: EXCELLENT SCIENCE - Marie Skłodowska-Curie Actions, Fostering new

skills by means of excellent initial training of researchers

Last update: 28 December 2023

Add to my booklet

# MARCLAIMED Integrated Decision Support Tool for Reliable and Affordable Application of Manage Aquifer Recharge with Alternative Water Resources in River Basin and Drought Management Plans

ID: 101136799

From: 1 February 2024 to: 31 January 2027

MARCLAIMED will be a breakthrough addressing in an efficient, sustainable, and trustworthy way the water scarcity and water stress mitigation. MARCLAIMED will support decision makers to integrate Managed Aquifer Recharge (MAR) with Alternative Water Resources (AWR) in River...

Coordinated in: Spain

Programme: Food, Bioeconomy Natural Resources, Agriculture and Environment

Last update: 17 January 2024

Add to my booklet

BoSS Bauhaus of the Seas Sails

ID: 101079995

From: 1 January 2023 to: 31 December 2025

"The vision of the BoSS project is to demonstrate and archive solutions for climate neutrality with a particular focus on coastal cities as an interface to healthy seas, ocean and water bodies envisioning a new triangle of sustainability, inclusion, and design focused on the...

Coordinated in: Portugal

Programme: Culture, creativity and inclusive society, Health, Digital, Industry and

Space, Civil Security for Society, Climate, Energy and Mobility, Food, Bioeconomy Natural

Resources, Agriculture and Environment

Last update: 16 December 2022

Add to my booklet

# ENTROPY DESIGN OF AN INNOVATIVE ENERGY-AWARE IT ECOSYSTEM FOR MOTIVATING BEHAVIOURAL CHANGES TOWARDS THE ADOPTION OF ENERGY EFFICIENT LIFESTYLES

ID: 649849

From: 1 September 2015 to: 30 November 2018

Taking into account the fact that buildings constitute the largest end-use energy consuming sector, the design and development of solutions targeted at reducing their energy consumption based on the adoption of energy efficient techniques and the active engagement of...

Coordinated in: Spain

Programme: <u>SOCIETAL CHALLENGES</u> - <u>Secure</u>, clean and efficient energy, <u>Reducing</u> energy consumption and carbon foorpint by smart and sustainable use

Last update: 19 August 2022

Add to my booklet

ANEMOS Development of a next generation wind resource forecasting system for the large-scale integration of onshore and offshore wind farms (ANEMOS)

ID: ENK5-CT-2002-00665

From: 1 October 2002 to: 30 September 2006

Objectives and problems to be solved :Accurate forecasting of the wind resource up to two days ahead is recognised as a major contribution for reliable large-scale wind power integration. Especially, in a liberalised electricity market, prediction tools enhance the position of...

Coordinated in: France

Programme: Programme for research, technological development and demonstration on "Energy, environment and sustainable development, 1998-2002"

Last update: 10 March 2023

Add to my booklet

#### ANNEX IV

### AI-ENABLED ICT, MOBILITY AND SECURITY

# ECHO European network of Cybersecurity centres and competence Hub for innovation and Operations

ID: 830943

From: 1 February 2019 to: 28 February 2023

ECHO delivers an organized and coordinated approach to improve proactive cyber defence of the European Union, through effective and efficient multi-sector collaboration. The Partners will execute on a 48-month work plan to develop, model and demonstrate a network of cyber...

Coordinated in: Belgium

Programme: INDUSTRIAL LEADERSHIP - Leadership in enabling and industrial

technologies - Information and Communication Technologies (ICT)

Last update: 30 January 2024

Add to my booklet

# FAR-EDGE Factory Automation Edge Computing Operating System Reference Implementation

ID: 723094

From: 1 October 2016 to: 31 October 2019

Despite the proclaimed benefits (i.e. scalability, reliability, cost-effectiveness) of Future Internet (FI) technologies (i.e. edge & cloud computing, IoT/CPS) for factory automation, their adoption from manufacturers remains low for various reasons, including technology...

Coordinated in: Italy

Programme: INDUSTRIAL LEADERSHIP - Leadership in enabling and industrial

technologies - Information and Communication Technologies (ICT)

Last update: 14 September 2023

Add to my booklet

Periodic Reporting for period 1 - CALLISTO (Copernicus Artificial Intelligence Services and data fusion with other distributed data sources and processing at the edge to support DIAS and HPC infrastructures)

Europe's sustainable economic growth and societal wellbeing can benefit from the exploitation of Earth Observation (EO) data, which is however hindered by the difficulties in accessing, using and interpreting it. The generation of effective information relies on the fusion...

Project: <u>CALLISTO</u> (ID: 101004152)

Programme: INDUSTRIAL LEADERSHIP - Leadership in enabling and industrial

technologies – Space
Last update: 9 May 2022
Add to my booklet

AIDA Artificial Intelligence Data Analysis

ID: 776262

From: 1 September 2018 to: 28 February 2022

AIDA brings a transformational innovation to the analysis of heliophysics data in four steps. First, AIDA will develop a new open source software called AIDApp written in Python (a free language) and capable of collecting, combining and correlating data from different space...

Coordinated in: Belgium

Programme: INDUSTRIAL LEADERSHIP - Leadership in enabling and industrial

technologies – Space, Enabling exploitation of space data

Last update: 23 December 2022

# <u>Final Report Summary - SAMURAI (Suspicious and Abnormal Behaviour Monitoring Using</u> a Network of Cameras & Sensors for Situation Awareness Enhancement)

- SAMURAI has developed and integrated an innovative intelligent surveillance system for robust monitoring of both inside and surrounding areas of a critical public infrastructure site (an airport terminal). SAMURAI has four significant novelties that make it...
- Project: SAMURAI (ID: 217899)
- Programme: Specific Programme "Cooperation": Security
- Last update: 23 April 2015
- Add to my booklet

### RISE-6G Reconfigurable Intelligent Sustainable Environments for 6G Wireless Networks

- ID: 101017011
- From: 1 January 2021 to: 31 December 2023
- Visions and plans on forthcoming B5G/6G networks aim to provide flexible connect-compute technologies to support future innovative services and uses cases.
   Considering the 2030 horizon, B5G/6G networks need to create the basis for human-centred smart societies and vertical...
- Coordinated in: France
- Programme: INDUSTRIAL LEADERSHIP Leadership in enabling and industrial technologies Information and Communication Technologies (ICT)
- Last update: 5 February 2024
- Add to my booklet

### Periodic Reporting for period 2 - AIDA (Artificial Intelligence Data Analysis)

- AIDA uses some of the most advanced data analysis techniques to analyse the data available from space missions and from space simulations. AIDA identifies three major trends in our field of research and in the wider society. First, there has been a tremendous accumulation of...
- Project: <u>AIDA</u> (ID: 776262)
- Programme: <u>INDUSTRIAL LEADERSHIP</u> <u>Leadership in enabling and industrial technologies Space</u>
- Last update: 14 April 2023
- Add to my booklet
- INFORE Interactive Extreme-Scale Analytics and Forecasting
- ID: 825070
- From: 1 January 2019 to: 31 March 2022

- At an increasing rate, industrial and scientific institutions need to deal with massive data flows streaming in from a multitude of sources. For instance, maritime surveillance applications combine high-velocity data streams, including vessel position signals emitted from...
- Coordinated in: Greece
- Programme: <u>INDUSTRIAL LEADERSHIP</u> <u>Leadership in enabling and industrial</u> technologies Information and Communication Technologies (ICT)
- Last update: 28 December 2022
- Add to my booklet

# <u>Final Report Summary - SMARTOPENDATA (Linked Open Data for environment protection in Smart Regions)</u>

- The SmartOpenData project has completed the creation of a Linked Open Data -LOD-infrastructure extended throughout Europe. This research infrastructure has five different pilots as one of its most visible outcomes. Nevertheless, those tools and applications...
- Project: <u>SMARTOPENDATA</u> (ID: 603824)
- Programme: Specific Programme "Cooperation": Environment (including Climate Change)
- Last update: 2 June 2016
- Add to my booklet

### IntelComp A Competitive Intelligence Cloud/HPC Platform for AI-based STI Policy Making

- ID: 101004870
- From: 1 January 2021 to: 31 December 2023
- IntelComp sets out to build an innovative Cloud Platform that will offer Artificial Intelligence based services to public administrators and policy makers across Europe for data- and evidence-driven policy design and implementation in the field of Science, Technology and...
- Coordinated in: Spain
- Programme: Explore new forms of innovation, with special emphasis on social innovation and creativity and understanding how all forms of innovation are developed, succeed or fail, SOCIETAL CHALLENGES - Europe In A Changing World - Inclusive, Innovative And Reflective Societies
- Last update: 22 January 2024
- Add to my booklet

# <u>COPKIT Technology, training and knowledge for Early-Warning / Early-Action led policing in fighting Organised Crime and Terrorism</u>

ID: 786687

From: 1 June 2018 to: 30 September 2021

"The COPKIT project addresses the problem of analysing, preventing, investigating and mitigating the use of new information and communication technologies by organised crime and terrorist groups. This question is a key challenge for policy-makers and LEAs due to the complexity...

Coordinated in: Spain

Programme: Ensure privacy and freedom, including in the Internet and enhance the societal, legal and ethical understanding of all areas of security, risk and management, Secure societies

- Protecting freedom and security of Europe and its citizens, Fight crime, illegal trafficking and terrorism, including understanding and tackling terrorist ideas and beliefs

Last update: 20 October 2023

Add to my booklet

REPORT SUMMARY

# <u>Periodic Reporting for period 2 - NeCOL (NeCOL: An Innovative Methodology for Building Better Deep Learning Tools for Real Word Applications)</u>

Over the last years, the vast increase of digital data and the access to powerful computation resources have stimulated the fourth industrial revolution through the application of Artificial Intelligence (AI), specifically the application of deep neural networks (DNN), a.k.a...

Project: <u>NeCOL</u> (ID: 799078)

Programme: EXCELLENT SCIENCE - Marie Skłodowska-Curie Actions

Last update: 11 January 2022

Add to my booklet

MATILDA A HOLISTIC, INNOVATIVE FRAMEWORK FOR THE DESIGN,
DEVELOPMENT AND ORCHESTRATION OF 5G-READY APPLICATIONS AND
NETWORK SERVICES OVER SLICED PROGRAMMABLE INFRASTRUCTURE

ID: 761898

From: 1 June 2017 to: 31 July 2020

The vision of MATILDA is to design and implement a holistic 5G end-to-end services operational framework tackling the lifecycle of design, development and orchestration of 5G-ready applications and 5G network services over programmable infrastructure, following a unified...

Coordinated in: Italy

Programme: INDUSTRIAL LEADERSHIP - Leadership in enabling and industrial

technologies - Information and Communication Technologies (ICT)

Last update: 18 August 2022

Add to my booklet

Explanation in Online Help and Offline Training Based on Continuous Simulation

ID: BRPR950049

From: 1 January 1996 to: 31 December 1998

The main outcomes of the research activities of the EXTRAS project are the generic knowledge framework, and an extensive amount of the software produced which has allowed further steps in developing explanation systems. Explanation systems that are quite difficult, if not imp...

Coordinated in: United Kingdom

Programme: Specific research and technological development programme in the field of

industrial and materials technologies, 1994-1998

Last update: 21 October 1999

Add to my booklet

VISORSURF VisorSurf - A Hardware Platform for Software-driven Functional Metasurfaces

ID: 736876

From: 1 January 2017 to: 31 December 2020

Metasurfaces, thin film planar, artificial structures, have recently enabled the realization of novel electromagnetic (EM) and optical components with engineered functionalities. These include total EM radiation absorption, filtering and steering of light and sound, as well as...

Coordinated in: Greece

Programme: EXCELLENT SCIENCE - Future and Emerging Technologies (FET), FET Open

Last update: 23 August 2022

Add to my booklet

#### PROJECT

#### NonSequeToR Non-sequence models for tokenization replacement

ID: 740516

From: 1 October 2017 to: 30 September 2023

Natural language processing (NLP) is concerned withcomputer-based processing of natural language, withapplications such as human-machine interfaces and information access. The capabilities of NLP are currently severely limited compared to humans. NLP has high errorrates for...

Coordinated in: Germany

Programme: EXCELLENT SCIENCE - European Research Council (ERC)

Last update: 23 August 2022

Add to my booklet

REPORT SUMMARY

### Periodic Reporting for period 2 - AI4DI (Artificial Intelligence for Digitizing Industry)

The industrial revolution we are witnessing is driven by increasing complexity, automation, more intelligence and continuous focus on optimization. Today, Artificial intelligence (AI) accelerates this transformation by remodelling industries with new processes and...

Project: <u>AI4DI</u> (ID: 826060)

Programme: ECSEL

Last update: 10 December 2021

Add to my booklet

### INSPIRE-5Gplus INtelligent Security and PervasIve tRust for 5G and Beyond

ID: 871808

From: 1 November 2019 to: 31 October 2022

The goal of INSPIRE-5Gplus is to advance security of 5G and Beyond networks via two main

approaches: (1) by leveraging/extending existing assets such as Trusted Execution

Environments (TEEs), Remote Attestation/Path Proof/RCA (Root Cause Analysis), and end-

to-end liability...

Coordinated in: Germany

Programme: INDUSTRIAL LEADERSHIP - Leadership in enabling and industrial

technologies - Information and Communication Technologies (ICT)

Last update: 19 December 2023

## REPORT SUMMARY

### AutoFair Human-Compatible Artificial Intelligence with Guarantees

ID: 101070568

From: 1 October 2022 to: 30 September 2025

In this proposal, we address the matter of transparency and explainability of AI using approaches inspired by control theory. Notably, we consider a comprehensive and flexible certification of properties of AI pipelines, certain closed-loops and more complicated...

Coordinated in: Czechia

Programme: Digital, Industry and Space, Artificial Intelligence and Robotics

Last update: 4 September 2022

Add to my booklet

Periodic Reporting for period 1 - CALLISTO (Copernicus Artificial Intelligence Services and data fusion with other distributed data sources and processing at the edge to support DIAS and HPC infrastructures)

Europe's sustainable economic growth and societal wellbeing can benefit from the exploitation of Earth Observation (EO) data, which is however hindered by the difficulties in accessing, using and interpreting it. The generation of effective information relies on the fusion...

Project: <u>CALLISTO</u> (ID: 101004152)

Programme: INDUSTRIAL LEADERSHIP - Leadership in enabling and industrial

technologies – Space
Last update: 9 May 2022
Add to my booklet

# <u>Periodic Reporting for period 1 - NL4XAI (Interactive Natural Language Technology for Explainable Artificial Intelligence)</u>

The aim of this four-year European project is to use natural language to generate explanations for decisions made by an Artificial Intelligence (AI) system, which are understandable to non-expert users. According to Polanyi's paradox, humans know more than they can explain...

Project: NL4XAI (ID: 860621)

Programme: EXCELLENT SCIENCE - Marie Skłodowska-Curie Actions

Last update: 2 March 2022

### Drones4Safety Inspection Drones for Ensuring Safety in Transport Infrastructures

ID: 861111

From: 1 June 2020 to: 31 May 2023

The Drones4Safety project aims to increase the safety of the European civil transport system by building a cooperative, autonomous, and continuously operating drone system that will be offered to railway and bridge operators to inspect their transportation infrastructure...

Coordinated in: Denmark

Programme: SOCIETAL CHALLENGES - Smart, Green And Integrated Transport

Last update: 15 January 2024

Add to my booklet

Add to my booklet

# STEP2DYNA Spatial-temporal information processing for collision detection in dynamic environments

ID: 691154

From: 1 July 2016 to: 31 December 2021

In the real world, collision happens at every second - often results in serious accidents and fatalities. For example, there are more than 3560 people died from vehicle collision per day worldwide. On the other sector, autonomous unmanned aerial vehicles (UAVs) have...

Coordinated in: United Kingdom

Programme: EXCELLENT SCIENCE - Marie Skłodowska-Curie Actions, Stimulating

innovation by means of cross-fertilisation of knowledge

Last update: 8 December 2023

Add to my booklet

# ADAPT Adaptive Decision support for Agents negotiation in electricity market and smart grid Power Transactions

ID: 703689

From: 1 January 2017 to: 31 December 2018

ADAPT explores the theme of decision support for agents negotiations in the complementary environments of electricity markets and smart grids. The EU priority of increasing the penetration of renewable energy sources in the power system has led to the wide acceptance of the...

Coordinated in: Spain

Programme: EXCELLENT SCIENCE - Marie Skłodowska-Curie Actions, Nurturing

excellence by means of cross-border and cross-sector mobility

Last update: 11 August 2022

Add to my booklet

# <u>iTalk2Learn Talk, Tutor, Explore, Learn: Intelligent Tutoring and Exploration for Robust Learning</u>

ID: 318051

From: 1 November 2012 to: 31 October 2015

In the aftermath of the PISA studies, which identified weaknesses of students in many European countries, especially in mathematics, the education of children in the elementary school grades has received a lot of attention. Yet, most learning systems that have been developed ...

Coordinated in: Germany

Programme: Specific Programme "Cooperation": Information and communication

technologies

Last update: 22 April 2017 Add to my booklet

### INFORE Interactive Extreme-Scale Analytics and Forecasting

ID: 825070

From: 1 January 2019 to: 31 March 2022

At an increasing rate, industrial and scientific institutions need to deal with massive data flows streaming in from a multitude of sources. For instance, maritime surveillance applications combine high-velocity data streams, including vessel position signals emitted from...

Coordinated in: Greece

Programme: INDUSTRIAL LEADERSHIP - Leadership in enabling and industrial

technologies - Information and Communication Technologies (ICT)

Last update: 28 December 2022

Add to my booklet

### NL4XAI Interactive Natural Language Technology for Explainable Artificial Intelligence

ID: 860621

From: 1 October 2019 to: 30 September 2024

According to Polanyi's paradox, humans know more than they can explain, mainly due to the huge amount of implicit knowledge they unconsciously acquire trough culture, heritage, etc. The same applies for Artificial Intelligence (AI) systems mainly learnt automatically from...

Coordinated in: Spain

Programme: EXCELLENT SCIENCE - Marie Skłodowska-Curie Actions, Fostering new

skills by means of excellent initial training of researchers

Last update: 15 January 2024

Add to my booklet

# INSPIRE-5Gplus INtelligent Security and PervasIve tRust for 5G and Beyond

ID: 871808

From: 1 November 2019 to: 31 October 2022

The goal of INSPIRE-5Gplus is to advance security of 5G and Beyond networks via two main

approaches: (1) by leveraging/extending existing assets such as Trusted Execution

Environments (TEEs), Remote Attestation/Path Proof/RCA (Root Cause Analysis), and end-

to-end liability...

Coordinated in: Germany

Programme: INDUSTRIAL LEADERSHIP - Leadership in enabling and industrial

technologies - Information and Communication Technologies (ICT)

Last update: 19 December 2023

Add to my booklet

#### ALLIES Artificial inteLLigence In sustainable dEvelopment goalS

ID: 101126626

From: 1 January 2024 to: 31 December 2028

ALLIES ("Artificial intelLigence In sustainable dEvelopment goals") is a new excellent collaborative postdoctoral programme led by the Spanish National Research Council (CSIC) and coordinated through the Artificial Intelligence Research Institute (IIIA) for the recruitment...

Coordinated in: Spain

Programme: Marie Skłodowska-Curie Actions (MSCA)

Last update: 7 November 2023

Add to my booklet

Collaborative robots work like humans, with humans

Seamless human-robot collaboration supported by smart mechatronics and AI-based perception exceeds performance targets and inspires team spirit.

Project: SHERLOCK (ID: 820689)

Available languages: DEENESFRITPL

Last update: 3 February 2023

Add to my booklet

<u>Periodic Reporting for period 2 - COLT-MDP (Computational Learning Theory: compact representation, efficient computation, and societal challenges in learning MDPs)</u>

Artificial Intelligence (AI) and Machine Learning (ML) hold a great promise for advancing humanity over the next decades. While progress in AI was initially slow, mainly due to initial over-expectations, AI made tremendous advances in the last decade. Machine learning is...

Project: <u>COLT-MDP</u> (ID: 882396)

Programme: EXCELLENT SCIENCE - European Research Council (ERC)

Last update: 25 January 2024

Add to my booklet

### QROWD QROWD - Because Big Data Integration is Humanly Possible

ID: 732194

From: 1 December 2016 to: 30 November 2019

Big Data integration in European cities is of utmost importance for municipalities and companies to offer effective information services, enable efficient data-driven transportation and mobility, reduce CO2 emissions, assess the efficiency of infrastructure, as well as enhance...

Coordinated in: United Kingdom

Programme: INDUSTRIAL LEADERSHIP - Leadership in enabling and industrial

technologies - Information and Communication Technologies (ICT)

Last update: 16 August 2022

Add to my booklet

#### BDVe Big Data Value ecosystem

ID: 732630

From: 1 January 2017 to: 31 December 2020

The mission of BDVe is to support the Big Data Value PPP in realizing a vibrant data-driven EU economy or said in other words, BDVe will support the implementation of the PPP to be a SUCCESS.Behind that mission, there are multiple goals to achieve, which should be taken into...

Coordinated in: Germany

Programme: INDUSTRIAL LEADERSHIP - Leadership in enabling and industrial

technologies - Information and Communication Technologies (ICT)

Last update: 4 September 2022

Add to my booklet

# <u>Final Report Summary - MATRIX (New Multi-HAzard and MulTi-RIsK Assessment MethodS for Europe)</u>

Executive Summary:Disaster risk reduction (DDR) activities generally treat different natural hazards and their associated risks separately. However, this approach ignores the spatial and temporal interactions that may arise along the disaster risk chain. For instance, an...

Project: MATRIX (ID: 265138)

Programme: Specific Programme "Cooperation": Environment (including Climate Change)

Last update: 11 February 2015

Add to my booklet

#### Final Report Summary - NI2S3 (Net information integration services for security systems)

Executive summary: Complex interactions between the elements of a critical infrastructure (CI) indicate that there is a need to deploy a corresponding infrastructure protection system, which is capable of extending security control to all elements of the protected system, a...

Project: NI2S3 (ID: 225488)

Programme: Specific Programme "Cooperation": Security

Last update: 1 October 2013

Add to my booklet

<u>Periodic Reporting for period 1 - SafeOPS (From Prediction to Decision Support - Strengthening Safe and Scalable ATM Services through Automated Risk Analytics based on Operational Data from Aviation Stakeholders)</u>

The next generation of Air Traffic Management (ATM) systems are pushed more and more towards digitalization, driven by two goals that are hard to combine. Firstly, the demand for capacity and cost-efficiency of air transport operations increases. Secondly, already high levels...

Project: SafeOPS (ID: 892919)

Programme: SOCIETAL CHALLENGES - Smart, Green And Integrated Transport

Last update: 16 May 2022 Add to my booklet

# HR-Recycler Hybrid Human-Robot RECYcling plant for electriCal and eLEctRonic equipment

ID: 820742

From: 1 December 2018 to: 30 November 2022

The technological advances that have been achieved over the past decades have led to a tremendous increase of both the types and the total amount of electrical and electronic equipment that is manufactured. Despite the importance of Waste Electrical and Electronic Equipment...

Coordinated in: Greece

Programme: INDUSTRIAL LEADERSHIP - Leadership in enabling and industrial technologies - Advanced manufacturing and processing, Technologies for Factories of the Future

Last update: 11 December 2023

Add to my booklet

# Enabling virtual worlds and augmented interaction in high-impact applications to support the realisation of Industry 5.0

This Challenge aims at enabling the use of high-fidelity virtual worlds in high-impact markets and applications promoting Industry 5.0 principles of sustainability, human-centric, and resilience by scaling up cutting-edge innovations for platforms, middleware, tools, and... Available languages:

ΕN

Last update: 17 October 2023

Add to my booklet

### ATRIA AI-POWERED GROUND SEGMENT CONTROL FOR FLEXIBLE PAYLOADS

ID: 101004215

From: 1 April 2021 to: 31 March 2024

A new generation of completely flexible satellites in terms of mission definition is currently appearing in the space segment as a response to the 5G revolution, resulting in an unprecedented integration of the satellite services with the terrestrial deployments. In this... Coordinated in: Spain

Programme: Enabling advances in space technology, INDUSTRIAL LEADERSHIP - Leadership in enabling and industrial technologies – Space, Future Internet: Software, hardware, Infrastructures, technologies and services

Last update: 27 December 2023

Add to my booklet

<u>CALLISTO Copernicus Artificial Intelligence Services and data fusion with other distributed data sources and processing at the edge to support DIAS and HPC infrastructures</u>

ID: 101004152

From: 1 January 2021 to: 31 December 2023

Artificial Intelligence (AI) is already part of our lives and is extensively entering the space sector to offer value-added Earth Observation (EO) products and services. Copernicus data and other georeferenced data sources are often highly heterogeneous, distributed and...

Coordinated in: Italy

Programme: INDUSTRIAL LEADERSHIP - Leadership in enabling and industrial

technologies - Space, Enabling exploitation of space data

Last update: 27 December 2023

Add to my booklet

### DOSSIER-Cloud DEVOPS-BASED SOFTWARE ENGINEERING FOR THE CLOUD

ID: 692251

From: 1 January 2016 to: 31 December 2018

DOSSIER-Cloud implements a series of coordination and support actions for transferring knowledge and exchanging best practices in the research area of Software Engineering for Distributed Systems development. It brings together two internationally recognized scientific groups...

Coordinated in: Cyprus

Programme: Twinning of research institutions

Last update: 11 August 2022

Add to my booklet

# e-DIPLOMA Electronic, Didactic and Innovative Platform for Learning based On Multimedia Assets

ID: 101061424

From: 1 September 2022 to: 31 August 2025

Distance learning has become a great ally in the current Pandemic situation. The e-DIPLOMA project will establish the e-learning in an upper quality level in a three years' research project, posing the use of Augmented Reality/Virtual Reality, Artificial Intelligence...

Coordinated in: Spain

Programme: Culture, creativity and inclusive society, Social and Economic Transformations

Last update: 16 September 2022

Add to my booklet

SoBigData SoBigData Research Infrastructure

ID: 654024

From: 1 September 2015 to: 31 December 2019

One of the most pressing and fascinating challenges scientists face today, is understanding the complexity of our globally interconnected society. The big data arising from the digital breadcrumbs of human activities promise to let us scrutinize the ground truth of individual...

Coordinated in: Italy

Programme: Integrating and opening existing national and regional research infrastructures of

European interest, EXCELLENT SCIENCE - Research Infrastructures

Last update: 5 September 2023

### ATRIA AI-POWERED GROUND SEGMENT CONTROL FOR FLEXIBLE PAYLOADS

ID: 101004215

From: 1 April 2021 to: 31 March 2024

A new generation of completely flexible satellites in terms of mission definition is currently appearing in the space segment as a response to the 5G revolution, resulting in an

unprecedented integration of the satellite services with the terrestrial deployments. In this...

Coordinated in: Spain

Programme: Enabling advances in space technology, INDUSTRIAL LEADERSHIP - Leadership in enabling and industrial technologies – Space, Future Internet: Software, hardware, Infrastructures, technologies and services

Last update: 27 December 2023

Add to my booklet

# MANiBOT Advancing the physical intelligence and performance of roBOTs towards humanlike bi-manual objects MANipulation

ID: 101120823

From: 1 November 2023 to: 30 April 2027

The MANiBOT research aims at bi-manual mobile robots, able to perform a wide variety of manipulation tasks with highly diverse objects, possibly partly or fully unknown beforehand, in a human-like manner and performance. To achieve this, we advance and fuse all necessary...

Coordinated in: Greece

Programme: Digital, Industry and Space, Artificial Intelligence and Robotics

Last update: 7 July 2023 Add to my booklet

### PALAEMON PALAEMON – A holistic passenger ship evacuation and rescue ecosystem

ID: 814962

From: 1 June 2019 to: 31 January 2023

PALAEMON proposes the development and evaluation of a sophisticated mass centralised evacuation system, based on a radical re-thinking of Mass Evacuation Vessels (MEVs) combined with an intelligent ecosystem of critical components providing real-time access to and...

Coordinated in: France

Programme: SOCIETAL CHALLENGES - Smart, Green And Integrated Transport

Last update: 2 January 2024

Add to my booklet

### QUARTZ Quantum Information Access and Retrieval Theory

ID: 721321

From: 1 January 2017 to: 31 December 2020

Quantum Information Access and Retrieval TheoryWe aim to establish an European Training Network (ETN) on QUantum information Access and Retrieval Theory (QUARTZ). Towards a new approach to Information Access and Retrieval (IAR) addressing the challenges of the dynamic and...

Coordinated in: Italy

Programme: EXCELLENT SCIENCE - Marie Skłodowska-Curie Actions, Fostering new

skills by means of excellent initial training of researchers

Last update: 23 August 2022

### ARESIBO Augmented Reality Enriched Situation awareness for Border security

ID: 833805

From: 1 May 2019 to: 31 July 2022

ARESIBO aims at improving the efficiency of the border surveillance systems by providing the operational teams and the tactical command and control level with an accurate and comprehensive information. The pillars of research in ARESIBO are three-fold: 1. Set-up a complete...

Coordinated in: France

Programme: Secure societies - Protecting freedom and security of Europe and its citizens, Strengthen security through border management, Support the Union's external security and its including through conflict properties and pages building

security policies including through conflict prevention and peace-building

Last update: 13 June 2023 Add to my booklet

# RIDE2RAIL Travel Companion enhancements and RIDE-sharing services syncronised to RAIL and Public Transport

ID: 881825

From: 1 December 2019 to: 30 April 2023

RIDE2RAIL aims to integrate multiple (public/private/social) data sets and sources and existing transport platforms to promote an effective Ride Sharing practice of citizens, making it a complementary transport mode that extends public transport and rail networks. The...

Coordinated in: Belgium

Programme: <u>Innovation Programme 4</u>: <u>IT Solutions for attractive railway</u> <u>services</u>, <u>SOCIETAL CHALLENGES</u> - <u>Smart</u>, <u>Green And Integrated Transport</u>

Last update: 18 December 2023

Add to my booklet

# MUSKETEER Machine learning to augment shared knowledge in federated privacy-preserving scenarios

ID: 824988

From: 1 December 2018 to: 30 November 2021

The massive increase in data collected and stored worldwide calls for new ways to preserve privacy while still allowing data sharing among multiple data owners. Today, the lack of trusted and secure environments for data sharing inhibits data economy while legality, privacy...

Coordinated in: Ireland

Programme: INDUSTRIAL LEADERSHIP - Leadership in enabling and industrial

technologies - Information and Communication Technologies (ICT)

Last update: 26 July 2022 Add to my booklet

#### SPARTA Strategic programs for advanced research and technology in Europe

ID: 830892

From: 1 February 2019 to: 30 June 2022

In the domain of Cybersecurity Research and innovation, European scientists hold pioneering positions in fields such as cryptography, formal methods, or secure components. Yet this excellence on focused domains does not translate into larger-scale, system-level advantages...

Coordinated in: France

Programme: INDUSTRIAL LEADERSHIP - Leadership in enabling and industrial

technologies - Information and Communication Technologies (ICT)

Last update: 11 September 2023

Add to my booklet

# DE4A Digital Europe for All

ID: 870635

From: 1 January 2020 to: 30 April 2023

For a completely working Digital Single Market, effectively enabling the cross-border exercise by citizens and businesses of their Single Market rights, Member States must address several challenges on delivering better services. DE4A is a Member State-driven pilot, aligned...

Coordinated in: Spain

Programme: Explore new forms of innovation, with special emphasis on social innovation and creativity and understanding how all forms of innovation are developed, succeed or

fail, SOCIETAL CHALLENGES - Europe In A Changing World - Inclusive, Innovative And Reflective Societies

Last update: 19 December 2023

Add to my booklet

SCOUT Safe and COnnected aUtomation in road Transport

ID: 713843

From: 1 July 2016 to: 30 June 2018

"The project ""Safe and COnnected aUtomation in road Transport"" (SCOUT) aims at identifying pathways for an accelerated proliferation of safe and connected high-degree automated driving in Europe, taking into account user needs and expectations, technical and non-technical...

Coordinated in: Germany

Programme: SOCIETAL CHALLENGES - Smart, Green And Integrated Transport

Last update: 16 August 2022

Add to my booklet

7SHIELD Safety and Security Standards of Space Systems, ground Segments and Satellite data assets, via prevention, detection, response and mitigation of physical and cyber threats ID: 883284

From: 1 September 2020 to: 28 February 2023

The project addresses the security and the resilience of EU Ground Segments of Space Systems, meeting the crosscutting and the sectorial criteria of the EU critical infrastructures (2008/14). The Copernicus era has created a new market with the massive amounts of satellite...

Coordinated in: Italy

Programme: Improve cyber security, Secure societies - Protecting freedom and security of Europe and its citizens, Protect and improve the resilience of critical infrastructures, supply chains and transport modes

Last update: 19 December 2023

Add to my booklet

SANCUS SANCUS: analysis software scheme of uniform statistical sampling, audit and defence processes

ID: 952672

From: 1 September 2020 to: 30 November 2023

The project involves 15 Partners from 8 European countries, and aims to design and develop an analySis software scheme of uNiform statistiCal sampling, aUdit and defence proceSses

(SANCUS – an Roman god of trust). The main idea draws on formalising the logic of expressing...

Coordinated in: France

Programme: INDUSTRIAL LEADERSHIP - Leadership in enabling and industrial

technologies - Information and Communication Technologies (ICT)

Last update: 5 February 2024

Add to my booklet

#### AGENTCITIES.RTD Testbed for Worldwide Agent Network: Research and Development

ID: IST-2000-28385

From: 1 July 2001 to: 30 June 2003

The Agentcity vision is: An ambient proactive environment where heterogeneous autonomous and increasingly intelligent systems representing businesses, services and individuals are able to interact with each other in a peer to peer manner and enable flexible and dynamic composi...

Coordinated in: France

Programme: Programme for research, technological development and demonstration on a

"User-friendly information society, 1998-2002"

Last update: 13 June 2005 Add to my booklet

# HR-Recycler Hybrid Human-Robot RECYcling plant for electriCal and eLEctRonic equipment

ID: 820742

From: 1 December 2018 to: 30 November 2022

The technological advances that have been achieved over the past decades have led to a tremendous increase of both the types and the total amount of electrical and electronic equipment that is manufactured. Despite the importance of Waste Electrical and Electronic Equipment...

Coordinated in: Greece

Programme: <u>INDUSTRIAL LEADERSHIP - Leadership in enabling and industrial</u> technologies - Advanced manufacturing and processing, <u>Technologies for Factories of the</u> Future

Last update: 11 December 2023

Add to my booklet

# <u>DIH-World DIH-World - Accelerating deployment and matureness of DIHs for the benefit of Digitisation of European SMEs</u>

ID: 952176

From: 1 July 2020 to: 30 June 2023

DIH-World aims to accelerate the uptake of advanced digital technologies by European manufacturing SMEs in all sectors and support them in building sustainable competitive advantages and reaching global markets strengthening the capacities of regional DIHs, particularly in...

Coordinated in: Spain

Programme: INDUSTRIAL LEADERSHIP - Leadership in enabling and industrial

technologies - Information and Communication Technologies (ICT)

Last update: 27 December 2023

Add to my booklet

# METRO-HAUL METRO High bandwidth, 5G Application-aware optical network, with edge storage, compUte and low Latency

ID: 761727

From: 1 June 2017 to: 30 September 2020

METRO-HAUL is a project proposal addressing the Horizon 2020 ICT-07 5G PPP call; it is an RIA, focusing on strand 2 (high capacity elastic – optical networks) and strand 3 (software networks). The central topic is cost-efficient optical metro networks for 5G backhaul. The...

Coordinated in: United Kingdom

Programme: INDUSTRIAL LEADERSHIP - Leadership in enabling and industrial

technologies - Information and Communication Technologies (ICT)

Last update: 25 August 2022

Add to my booklet

# ENSURESEC End-to-end Security of the Digital Single Market's E-commerce and Delivery Service Ecosystem

ID: 883242

From: 1 June 2020 to: 31 May 2022

ENSURESEC is a sociotechnical solution for safeguarding the Digital Single Market's e-commerce operations against cyber and physical threats. It combines an automatic, rigorous, distributed and open-source toolkit for protecting e-commerce, with monitoring of the impact of...

Coordinated in: Portugal

Programme: Improve cyber security, Secure societies - Protecting freedom and security of Europe and its citizens, Protect and improve the resilience of critical infrastructures, supply chains and transport modes

Last update: 19 December 2023

Add to my booklet

# <u>Data Vaults Persistent Personal Data Vaults Empowering a Secure and Privacy Preserving</u> Data Storage, Analysis, Sharing and Monetisation Platform

ID: 871755

From: 1 January 2020 to: 30 April 2023

A strong data economy is emerging in Europe, where both large companies and SMEs acknowledge the fundamental value of Big Data to cause disruptive change in markets and business models .Nevertheless, the growth of the data economy is hampered by the lack of trusted, secure and...

Coordinated in: Germany

Programme: INDUSTRIAL LEADERSHIP - Leadership in enabling and industrial

technologies - Information and Communication Technologies (ICT)

Last update: 18 December 2023

Add to my booklet

# <u>ChipAI Energy-efficient and high-bandwidth neuromorphic nanophotonic Chips for Artificial Intelligence systems</u>

ID: 828841

From: 1 March 2019 to: 30 November 2022

The same way the internet revolutionized our society, the rise of Artificial Intelligence (AI) that can learn without the need of explicit instructions is transforming our life. AI uses brain inspired neural network algorithms powered by computers. However, these central...

Coordinated in: Portugal

Programme: EXCELLENT SCIENCE - Future and Emerging Technologies (FET), FET Open

Last update: 6 February 2024

Add to my booklet

PRO-ACT Planetary RObots Deployed for Assembly and Construction Tasks

ID: 821903

From: 1 February 2019 to: 30 April 2021

The proposal addresses the establishment, with the support of mobile robotic platforms, of a precursor lunar base with essential capabilities in preparation to commercial exploitation of in-situ resources by assembling an ISRU resource extraction and utilization system will be...

Coordinated in: Belgium

Programme: Enabling European competitiveness, non-dependence and innovation of the

<u>European space sector, Enabling advances in space technology, INDUSTRIAL</u> LEADERSHIP - Leadership in enabling and industrial technologies – Space

Last update: 25 August 2022

Add to my booklet

# IM-SAFE Harmonised Transport Infrastructure Monitoring in Europe for Optimal Maintenance and Safety

ID: 958171

From: 1 November 2020 to: 30 April 2023

Transport infrastructure is highly important on the EU Strategic Agenda. This infrastructure is facing real challenges due to ageing, rapid growth of traffic loads, and natural and man-made resilience threats. Safety risks have become critical in the recent years and...

Coordinated in: Netherlands

Programme: <u>INDUSTRIAL LEADERSHIP</u> - <u>Leadership in enabling and industrial</u> technologies - <u>Advanced manufacturing and processing</u>, <u>INDUSTRIAL LEADERSHIP</u> - <u>Leadership in enabling and industrial technologies</u> - <u>Advanced materials</u>

Last update: 26 May 2022 Add to my booklet

# UNICORE A Common Code Base and Toolkit for Deployment of Applications to Secure and Reliable Virtual Execution Environments

ID: 825377

From: 1 January 2019 to: 31 March 2022

Quickly developing, upgrading and deploying applications is the core function of the software and IT industry, often achieved through running software on shared hardware (e.g., on data centers) in order to reduce costs and improve profitability. At this point however, the...

Coordinated in: Romania

Programme: INDUSTRIAL LEADERSHIP - Leadership in enabling and industrial

technologies - Information and Communication Technologies (ICT)

Last update: 2 December 2022

Add to my booklet

**DroC2om Drone Critical Communications** 

ID: 763601

From: 1 September 2017 to: 31 August 2019

The key objective of the DroC2om project is to contribute to the definition of integrated cellular-satellite data link specifications for UASs. Major focus will be on the design and evaluation of data links based on experimental radio investigations and system simulations.

The...

Coordinated in: Denmark

Programme: SOCIETAL CHALLENGES - Smart, Green And Integrated Transport, SESAR

<u>JU</u>

Last update: 24 May 2023 Add to my booklet

PHYSICS Optimized hybrid space-time service continuum in FAAS

ID: 101017047

From: 1 January 2021 to: 31 December 2023

PHYSICS empowers European CSPs exploit the most modern, scalable and cost-effective cloud model (FaaS), operated across multiple service and hardware types, provider locations, edge, and multi-cloud resources. To this end, it applies a unified continuum approach, including...

Coordinated in: Italy

Programme: INDUSTRIAL LEADERSHIP - Leadership in enabling and industrial

technologies - Information and Communication Technologies (ICT)

Last update: 28 December 2023

Add to my booklet

### INTER-IoT Interoperability of Heterogeneous IoT Platforms

ID: 687283

From: 1 January 2016 to: 31 December 2018

INTER-IOT project is aiming at the design, implementation and experimentation of an open cross-layer framework and associated methodology to provide voluntary interoperability among heterogeneous Internet of Things (IoT) platforms. The proposal will allow developing...

Coordinated in: Spain

Programme: INDUSTRIAL LEADERSHIP - Leadership in enabling and industrial

technologies - Information and Communication Technologies (ICT)

Last update: 11 August 2022

Add to my booklet

# <u>Multi-Moby Safe, Secure, High Performing Multi-Passanger and Multi-Commercial Uses Affordable EVs</u>

ID: 101006953

From: 1 December 2020 to: 30 November 2023

MULTI-MOBY is an ambitious proposal aiming at quickly finalizing the results of a cluster of GV and FoF EU projects addressing the development of technology for safe, efficient and affordable urban electric vehicles. A fleet of multi-passenger and multi-purpose commercial vans...

Coordinated in: Austria

Programme: SOCIETAL CHALLENGES - Smart, Green And Integrated Transport

Last update: 8 December 2023

Add to my booklet

#### OPERANDO Online Privacy Enforcement, Rights Assurance and Optimization

ID: 653704

From: 1 May 2015 to: 30 April 2018

The goal of the OPERANDO project is to specify, implement, field-test, validate and exploit an innovative privacy enforcement platform that will enable the Privacy as a Service (PaS) business paradigm and the market for online privacy services. The OPERANDO project will...

Coordinated in: United Kingdom

Programme: Secure societies - Protecting freedom and security of Europe and its citizens

Last update: 9 August 2022

Add to my booklet

### SUaaVE SUpporting acceptance of automated VEhicle

ID: 814999

From: 1 May 2019 to: 31 October 2022

While the deployment of connected automated vehicle (CAV) turns into reality, its acceptance has been called into question. Societal issues regarding public acceptance, user awareness and ethics, therefore, become priority concerns. The approach based on the technology push...

Coordinated in: Spain

Programme: SOCIETAL CHALLENGES - Smart, Green And Integrated Transport

Last update: 2 February 2024

Add to my booklet

AMBEATion Analog/Mixed Signal Back End Design Automation based on Machine Learning and Artificial Intelligence Techniques

ID: 101007730

From: 1 September 2021 to: 31 August 2025

In the field of the Electronic Integrated circuit design, the analog-mixed-signal (AMS) physical design of all analog blocks and of whole integrated circuits (IC) based on the Analog-on-Top approach still uses a handmade flow. The Electronic Design Automation (EDA) industry...

Coordinated in: Italy

Programme: EXCELLENT SCIENCE - Marie Skłodowska-Curie Actions, Stimulating

innovation by means of cross-fertilisation of knowledge

Last update: 18 December 2023

Add to my booklet

### CyCAT Cyprus Center for Algorithmic Transparency

ID: 810105

From: 1 October 2018 to: 31 December 2021

Despite strong indications that Cyprus is now in stable economic recovery, and that the island boasts one of the highest rates of tertiary educational attainment in Europe, the picture painted regarding the level of digital skills among citizens is a dismal one. In the 2017...

Coordinated in: Cyprus

Programme: Twinning of research institutions

Last update: 15 September 2022

Add to my booklet

# NEPHELE A LIGHTWEIGHT SOFTWARE STACK AND SYNERGETIC META-ORCHESTRATION FRAMEWORK FOR THE NEXT GENERATION COMPUTE CONTINUUM

ID: 101070487

From: 1 September 2022 to: 31 August 2025

The vision of NEPHELE is to enable the efficient, reliable and secure end-to-end orchestration of hyper-distributed applications over programmable infrastructure that is spanning across the compute continuum from Cloud-to-Edge-to-IoT, removing existing openness and...

Coordinated in: Greece

Programme: Digital, Industry and Space, Advanced Computing and Big Data

Last update: 26 August 2022

Add to my booklet

# CUE-GO Contextual Radio Cues for Enhancing Decision Making in Networks of **Autonomous Agents**

ID: 101116257

From: 1 January 2024 to: 31 December 2028

The CUE-GO project aims to conceive a novel methodological framework for enhancing the decision-making capabilities of autonomous agents through the exploitation of contextual radio cues of the environment. Radio cues represent a quantum leap from the traditional concept of...

Coordinated in: Italy

Programme: European Research Council (ERC)

Last update: 12 October 2023

Add to my booklet

### AI-Comp Artificial Intelligence and Competition

ID: 101098332

From: 1 November 2023 to: 31 October 2028

AI algorithms are increasingly being used in markets. It is generally agreed that they create a wealth of value by facilitating economic interactions. However, there are also concerns that when applied to market environments, they could lessen competition and harm consumers...

Coordinated in: Italy

Programme: European Research Council (ERC)

Last update: 3 November 2023

Add to my booklet

## ERINIA Evaluating the Robustness of Non-Credible Text Identification by Anticipating **Adversarial Actions**

ID: 101060930

From: 1 November 2022 to: 31 October 2024

As challenges posed by misinformation become apparent in the modern digital society, stateof-the-art methods of Artificial Intelligence, especially Natural Language Processing (NLP) and Machine Learning, are considered as countermeasures. Indeed, previous research has shown...

Coordinated in: Spain

Programme: Marie Skłodowska-Curie Actions (MSCA)

Last update: 26 August 2022

Add to my booklet

# ELISE European Learning and Intelligent Systems Excellence

ID: 951847

From: 1 September 2020 to: 31 August 2024

ELISE aims to make Europe competitive in AI through a network of excellence. The best European researchers in machine learning and AI have worked together to attract talent, to foster research through collaboration, and to inspire and be inspired by industry and society.

While...

Coordinated in: Finland

Programme: INDUSTRIAL LEADERSHIP - Leadership in enabling and industrial

technologies - Information and Communication Technologies (ICT)

Last update: 27 December 2023

Add to my booklet

# EMERALD Evidence Management for Continuous Certification as a Service in the Cloud

ID: 101120688

From: 1 November 2023 to: 31 October 2026

Cloud-based services have grown from basic computing services to complex ecosystems, comprising (virtual) infrastructure, business processes and application code. These advanced services also increasingly leverage the usage of Artificial Intelligence, including Machine...

Coordinated in: Spain

Programme: Cybersecurity, Civil Security for Society

Last update: 11 July 2023 Add to my booklet

### **CIO Common Interactive Objects**

ID: 740548

From: 1 December 2017 to: 31 May 2023

In CIO, common interactive objects are developed and explored to extend human control over the technological environment by human beings, both individually and together. CIO leads to a coherent framework of user interfaces to be applied in interaction design. Common...

Coordinated in: Denmark

Programme: EXCELLENT SCIENCE - European Research Council (ERC)

Last update: 6 February 2024

Add to my booklet

### INDIA Intelligent Networking of Dynamically Interrelated Actors

ID: IST-2000-28413

From: 1 September 2001 to: 31 January 2004

India will develop and test a methodology and an Internet based service, to transform the structure of a traditional company (Constellation Driver) value chain, from a sequence of activities involving a limited number of partners to a dynamic organisation with constellation of...

Coordinated in: Italy

Programme: Programme for research, technological development and demonstration on a

"User-friendly information society, 1998-2002"

Last update: 13 June 2005 Add to my booklet

#### DEL4ALL Digital Enhanced Learning for ALL

ID: 871573

From: 1 January 2020 to: 30 April 2022

The main goal of DEL4ALL is to transform the current European research and innovation initiatives in the area of digital enhanced learning into an increasingly cohesive, dynamic, participatory and sustainable ecosystem, capable of effectively stimulating collaboration among...

Coordinated in: Switzerland

Programme: INDUSTRIAL LEADERSHIP - Leadership in enabling and industrial

technologies - Information and Communication Technologies (ICT)

Last update: 18 December 2023

Add to my booklet

### KLEAN Knowledge-based EFB for green flight trajectory decision aid

ID: 306927

From: 1 June 2012 to: 31 July 2014

"The MAIN OBJECTIVE of the KLEAN project is to develop a custom knowledge-based EFB (Electronic Flight Bag) with SW packages implementing Advanced Weather Radar Post-processor (AWRP) and QAI (Quasi-Artificial Intelligence) agent algorithms, provided by Selex Galileo, for gree...

Coordinated in: Italy

Programme: Specific Programme "Cooperation": Joint Technology Initiatives

Last update: 11 March 2015

Add to my booklet

# Knowledge-based planning systems for autonomous agents - cognitive robotics at work

ID: FMBI983267

From: 1 December 1998 to: 31 May 1999

Research objectives and content The proposed project has the goal of applying the technology of advanced deductive databases and knowledge representation systems to the field of autonomous agents, in particular mobile robots. Indeed, recent research on cognitive robotics, a...

Coordinated in: Austria

Programme: Specific research and technological development programme in the field of the

training and mobility of researchers, 1994-1998

Last update: 5 April 2023 Add to my booklet

### COSSIM A Novel, Comprehensible, Ultra-Fast, Security-Aware CPS Simulator

ID: 644042

From: 1 February 2015 to: 31 January 2018

One of the main problems the CPS designers face is "the lack of simulation tools and models for system design and analysis". This is mainly because the majority of the existing simulation tools for complex CPS handle efficiently only parts of a system while they mainly...

Coordinated in: Greece

Programme: A new generation of components and systems: Engineering of advanced embedded and energy and resource efficient components and systems, INDUSTRIAL LEADERSHIP - Leadership in enabling and industrial technologies - Information and Communication Technologies (ICT)

Communication reciniologies (re

Last update: 7 September 2023

Add to my booklet

#### LAZARUS pLatform for Analysis of Resilient and secUre Software

ID: 101070303

From: 1 September 2022 to: 31 August 2025

LAZARUS is a three-year research and innovation project that aims to heal many of the security issues that befall modern software during its development lifecycle. The recently introduced area of DevSecOps - in medium to large companies - unfortunately lacks automated security...

Coordinated in: Greece

Programme: Cybersecurity, Civil Security for Society

Last update: 15 September 2022

Add to my booklet

### TRAPEZE TRAPEZE - TRAnsparency, Privacy and security for European citiZEns

ID: 883464

From: 1 September 2020 to: 31 August 2023

The TRAPEZE project aims to drive a cultural shift in the protection of the European data economy by weaving trust into its very foundation and reconstructing the concepts of control, transparency, and compliance through technical and methodological, citizen-first...

Coordinated in: Belgium

Programme: Ensure privacy and freedom, including in the Internet and enhance the societal, legal and ethical understanding of all areas of security, risk and management, Improve cyber security, Secure societies - Protecting freedom and security of Europe and its citizens

Last update: 7 September 2023

Add to my booklet

# E-PILOTS Evolution of cockPIt operations Levering on cOgnitive compuTing Services

ID: 831993

From: 1 January 2019 to: 31 December 2021

New technologies have allowed pilots to assume more responsibilities reducing the number of some mechanic and repetitive tasks through automation. The flight deck transition to digital computer-based flight management system has shown a reduction of the workload across a...

Coordinated in: Spain

Programme: SOCIETAL CHALLENGES - Smart, Green And Integrated Transport, Thematic

**Topics** 

Last update: 13 June 2022 Add to my booklet

#### EuDEco Modelling the European data economy

ID: 645244

From: 1 February 2015 to: 31 January 2018

The Modelling the European Data Economy (EuDEco) project will assist European sci-ence and industry in understanding and exploiting the potentials of data reuse in the context of Big and Open Data big data. The aim isto establish a self sustaining data market and thereby...

Coordinated in: Germany

Programme: Content technologies and information management: ICT for digital content, cultural and creative industries, INDUSTRIAL LEADERSHIP - Leadership in enabling and industrial technologies - Information and Communication Technologies (ICT)

Last update: 8 August 2022

Add to my booklet

#### CHARITY Cloud for Holography and Cross Reality

ID: 101016509

From: 1 January 2021 to: 30 June 2024

The impact of technology in the world's panorama is at an all-time high. Advanced media applications enabling immersive communication are becoming ubiquitous in our lives, and there is a global trend to adopt virtual solutions to support day-to-day business operations, social...

Coordinated in: Germany

Programme: INDUSTRIAL LEADERSHIP - Leadership in enabling and industrial

technologies - Information and Communication Technologies (ICT)

Last update: 30 January 2024

Add to my booklet

ExtremeXP EXPeriment driven and user eXPerience oriented analytics for eXtremely Precise outcomes and decisions

ID: 101093164

From: 1 January 2023 to: 31 December 2025

Extreme data characteristics (volume, speed, heterogeneity, distribution, diverse quality, etc.) challenge the state-of-the-art data-driven analytics and decision-making approaches in many critical domains such as crisis management, predictive maintenance, mobility, public...

Coordinated in: Greece

Programme: Digital, Industry and Space, Advanced Computing and Big Data

Last update: 25 November 2022

Add to my booklet

<u>EU-IoT The European IoT HUb - Growing a sustainable and comprehensive ecosystem for Next Generation Internet of Things</u>

ID: 956671

From: 1 October 2020 to: 31 March 2023

EU-IoT will act as an accelerator for the whole European IoT ecosystem towards transforming the current IoT community of researchers and innovators in Europe into an increasingly cohesive, dynamic, participatory and sustainable ecosystem, as an essential part of the Next...

Coordinated in: Switzerland

Programme: INDUSTRIAL LEADERSHIP - Leadership in enabling and industrial

technologies - Information and Communication Technologies (ICT)

Last update: 18 December 2023

Add to my booklet

#### CYRENE Certifying the Security and Resilience of Supply Chain Services

ID: 952690

From: 1 October 2020 to: 30 September 2023

Despite the tremendous socio-economic importance of Supply Chains (SCs), security officers and operators have still no easy and integrated way to protect their interconnected Critical Infrastructures (CIs) and cyber systems in the new digital era. CYRENE vision is to enhance...

Coordinated in: Italy

Programme: INDUSTRIAL LEADERSHIP - Leadership in enabling and industrial

technologies - Information and Communication Technologies (ICT)

Last update: 28 December 2023

Add to my booklet

NanoCommons The European Nanotechnology Community Informatics Platform: Bridging data and disciplinary gaps for industry and regulators (NanoCommons)

ID: 731032

From: 1 January 2018 to: 30 June 2022

Nanotechnologies and the resulting novel and emerging materials (NEMs) represent major areas of investment and growth for the European economy. Recent advances have enabled confidence in the understanding of what constitutes toxicity of NEMs in relation to health and

Coordinated in: United Kingdom

Programme: Integrating and opening existing national and regional research infrastructures of

European interest, EXCELLENT SCIENCE - Research Infrastructures

Last update: 8 December 2023

Add to my booklet

ASCENT Autonomous Vehicular Edge Computing and Networking for Intelligent

Transportation ID: 101086159

From: 1 March 2023 to: 28 February 2027

Intelligent Transportation Systems (ITS) are vital for enhancing road safety, alleviating traffic congestion, and saving energy in transport. However, due to the complex and dynamic operating environments of ITS including fast-moving vehicles, fluctuating vehicular...

Coordinated in: Sweden

Programme: Marie Skłodowska-Curie Actions (MSCA)

Last update: 17 October 2022

Add to my booklet

5G-CARMEN 5G for Connected and Automated Road Mobility in the European UnioN

ID: 825012

From: 1 November 2018 to: 31 July 2022

European mobility is drastically changing: growing urbanisation, environmental aspects, and safety are only a few of the key indicators pointing in this direction. Road infrastructures and vehicles are blending with the digital world, becoming always-connected, automated and...

Coordinated in: Italy

Programme: INDUSTRIAL LEADERSHIP - Leadership in enabling and industrial

technologies - Information and Communication Technologies (ICT)

Last update: 11 December 2023

Add to my booklet

# EMPYREAN EMPYREAN: TRUSTWORTHY, COGNITIVE AND AI-DRIVEN COLLABORATIVE ASSOCIATIONS OF IOT DEVICES AND EDGE RESOURCES FOR DATA PROCESSING

ID: 101136024

From: 1 February 2024 to: 31 January 2027

EMPYREAN envisages a hyper-distributed computing paradigm, based on federations of collaborative and heterogeneous IoT devices and resources (e.g., on RISC-V) across different providers and networks. These federations, namely Associations, operate autonomously and interconnect...

Coordinated in: Greece

Programme: Digital, Industry and Space, Artificial Intelligence and Robotics

Last update: 8 January 2024

Add to my booklet

#### LEGaTO Low Energy Toolset for Heterogeneous Computing

ID: 780681

From: 1 December 2017 to: 30 November 2020

Recently system integrators have dramatically increased their efforts in heterogeneous computing by integrating heterogeneous cores on die (ARM), utilizing general purpose GPUs (NVIDIA), combining CPUs and GPUs on same die (Intel, AMD), leveraging FPGAs (Altera, Xilinx)...

Coordinated in: Spain

Programme: INDUSTRIAL LEADERSHIP - Leadership in enabling and industrial

technologies - Information and Communication Technologies (ICT)

Last update: 11 July 2023 Add to my booklet

# NEUROKIT2E Open source deep learning platform dedicated to Embedded hardware and Europe

ID: 101112268

From: 1 June 2023 to: 31 May 2026

The NEUROKIT2E project aims at proposing a Deep Learning Platform for Embedded Hardware around an established European value chain (providing AI hardware and software). This open source platform will provide the necessary tools for Europe to play on the same level with its...

Coordinated in: France

Programme: Digital, Industry and Space, Key Digital Technologies

Last update: 28 June 2023 Add to my booklet

#### INSPIRE-5Gplus INtelligent Security and PervasIve tRust for 5G and Beyond

ID: 871808

From: 1 November 2019 to: 31 October 2022

The goal of INSPIRE-5Gplus is to advance security of 5G and Beyond networks via two main approaches: (1) by leveraging/extending existing assets such as Trusted Execution

Environments (TEEs), Remote Attestation/Path Proof/RCA (Root Cause Analysis), and end-to-end liability...

Coordinated in: Germany

Programme: INDUSTRIAL LEADERSHIP - Leadership in enabling and industrial

technologies - Information and Communication Technologies (ICT)

Last update: 19 December 2023

Add to my booklet

# ATMOSPHERE Adaptive, Trustworthy, Manageable, Orchestrated, Secure, Privacy-assuring, Hybrid Ecosystem for REsilient Cloud Computing

ID: 777154

From: 1 November 2017 to: 31 October 2019

ATMOSPHERE (Adaptive, Trustworthy, Manageable, Orchestrated, Secure Privacy-assuring Hybrid, Ecosystem for REsilient Cloud Computing) is a 24-month project aiming at the design and development of an ecosystem of a framework, platform and application of next generation...

Coordinated in: Spain

Programme: INDUSTRIAL LEADERSHIP - Leadership in enabling and industrial

technologies - Information and Communication Technologies (ICT)

Last update: 24 July 2023 Add to my booklet

#### FASTPARSE Fast Natural Language Parsing for Large-Scale NLP

ID: 714150

From: 1 February 2017 to: 31 July 2022

The popularization of information technology and the Internet has resulted in an unprecedented growth in the scale at which individuals and institutions generate,

communicate and access information. In this context, the effective leveraging of the vast amounts of available...

Coordinated in: Spain

Programme: EXCELLENT SCIENCE - European Research Council (ERC)

Last update: 2 February 2024

Add to my booklet

#### BRAINE Big data pRocessing and Artificial Intelligence at the Network Edge

ID: 876967

From: 1 May 2020 to: 30 November 2023

Edge computing offers many technical advantages, e.g., reduced latency, secure decentralized processing and storage, scalability at lower complexity, versatility to adapt the changes in resources and applications, and increased reliability. Edge computing can dramatically...

Coordinated in: Italy

Programme: ECSEL, INDUSTRIAL LEADERSHIP - Leadership in enabling and industrial

technologies - Information and Communication Technologies (ICT)

Last update: 18 December 2023

Add to my booklet

AIRPASS Advanced Integrated RPAS Avionics Safety Suite

ID: 763658

From: 1 November 2017 to: 29 February 2020

This proposal addresses "Topic 03: Aircraft Systems" of the SESAR ER RPAS call. Drones appear in a large variety of types, configurations and sizes. They are operated in a large variety of operational environments (i.e. locations, classes of airspace). However, it is...

Coordinated in: Germany

Programme: SOCIETAL CHALLENGES - Smart, Green And Integrated Transport, SESAR

<u>JU</u>

Last update: 17 August 2022

Add to my booklet

# FleXunity Scaling-up Power Flexible Communities business models empowered by Blockchain and AI

ID: 870146

From: 1 December 2019 to: 31 May 2022

The objective of FleXunity project is to deploy novel services for retailers and aggregators, enhanced by Virtual Power Plant (VPP) technology empowered with AI algorithms that can be focused on minimizing the cost of energy (bought in the wholesale market) and optimizing the...

Coordinated in: Portugal

Programme: PRIORITY 'Societal challenges, Horizon 2020 Framework

Programme, INDUSTRIAL LEADERSHIP - Leadership in enabling and industrial

technologies

Last update: 19 December 2023

Add to my booklet

## Stein-ML Stein's method and functional inequalities in machine learning

ID: 101024264

From: 1 September 2021 to: 30 November 2023

The project aims to develop quality measures for approximations in machine learning and statistics, using tools of probability and functional analysis, such as Stein's method and

functional inequalities. Approximate inference techniques have been used in the recent years

Coordinated in: Luxembourg

Programme: EXCELLENT SCIENCE - Marie Skłodowska-Curie Actions, Nurturing

excellence by means of cross-border and cross-sector mobility

Last update: 24 November 2023

Add to my booklet

EXPLOR EXperimentation and simulation based PLatform for beyond 5G Optical-wireless network Research and development

ID: 872897

From: 1 January 2020 to: 31 August 2024

The EXPLOR project proposes the development of a comprehensive modular software with fully validated state of the art (SOTA) component and system level numerical models, cognitive and adaptive features, as well as libraries with novel use cases and scenarios targeting Next...

Coordinated in: Portugal

Programme: EXCELLENT SCIENCE - Marie Skłodowska-Curie Actions, Stimulating

innovation by means of cross-fertilisation of knowledge

Last update: 5 February 2024

Add to my booklet

#### PROJECT

PRAETORIAN Protection of Critical Infrastructures from advanced combined cyber and physical threats

ID: 101021274

From: 1 June 2021 to: 30 September 2023

PRAETORIAN strategic goal is to increase the security and resilience of European CIs, facilitating the coordinated protection of interrelated CI against combined physical and cyber threats. To that end, the project will provide a multidimensional (economical, technological...

Coordinated in: France

Programme: Improve cyber security, Secure societies - Protecting freedom and security of Europe and its citizens, Protect and improve the resilience of critical infrastructures, supply chains and transport modes

Last update: 28 December 2023

Add to my booklet

**ROBINS** Robotics Technology for Inspection of Ships

ID: 779776

From: 1 January 2018 to: 30 June 2021

The ROBINS project aims at filling the technology and regulatory gaps that today still represent a barrier to the adoption of Robotics and Autonomous Systems (RAS) in activities related to inspection of ships, understanding end user's actual needs and expectations and...

Coordinated in: Italy

Programme: INDUSTRIAL LEADERSHIP - Leadership in enabling and industrial

technologies - Information and Communication Technologies (ICT)

Last update: 23 August 2022

Add to my booklet

VI-DAS Vision Inspired Driver Assistance Systems

ID: 690772

From: 1 September 2016 to: 31 August 2019

Road accidents continue to be a major public safety concern. Human error is the main cause of accidents. Intelligent driver systems that can monitor the driver's state and behaviour show promise for our collective safety. VI-DAS will progress the design of next-gen 720°...

Coordinated in: Spain

Programme: SOCIETAL CHALLENGES - Smart, Green And Integrated Transport

Last update: 17 August 2022

Add to my booklet

# <u>Final Report Summary - FESTOS (Foresight of Evolving Security Threats Posed by Emerging Technologies)</u>

Executive summary "FESTOS results are a very good contribution to policy and ethics discussions in the commission, FESTOS helps address challenges and threat of the future that need to be taken into account in Horizon 2020" (Ms Eva-Maria Engdahl EC DG enterprise and Industry...

Project: FESTOS (ID: 217993)

Programme: Specific Programme "Cooperation": Security

Last update: 29 March 2017

Add to my booklet

# <u>Periodic Reporting for period 1 - INNOVATE (INtelligeNt ApplicatiOns oVer Large ScAle DaTa StrEams)</u>

Predictive analytics is the key research subject for query-driven applications. Analytics offer the necessary basis for intelligent decision making. Due to the huge volumes of data, analytics could be executed on top of data partitions. Each partition contains only a piece of...

Project: INNOVATE (ID: 745829)

Programme: EXCELLENT SCIENCE - Marie Skłodowska-Curie Actions

Last update: 15 August 2020

Add to my booklet

# <u>STEP2DYNA Spatial-temporal information processing for collision detection in dynamic environments</u>

ID: 691154

From: 1 July 2016 to: 31 December 2021

In the real world, collision happens at every second - often results in serious accidents and fatalities. For example, there are more than 3560 people died from vehicle collision per day worldwide. On the other sector, autonomous unmanned aerial vehicles (UAVs) have...

Coordinated in: United Kingdom

Programme: EXCELLENT SCIENCE - Marie Skłodowska-Curie Actions, Stimulating innovation by means of cross-fertilisation of knowledge

Last update: 8 December 2023

Add to my booklet

### Drones4Safety Inspection Drones for Ensuring Safety in Transport Infrastructures

ID: 861111

From: 1 June 2020 to: 31 May 2023

The Drones4Safety project aims to increase the safety of the European civil transport system by building a cooperative, autonomous, and continuously operating drone system that will be offered to railway and bridge operators to inspect their transportation infrastructure...

Coordinated in: Denmark

Programme: SOCIETAL CHALLENGES - Smart, Green And Integrated Transport

Last update: 15 January 2024

Add to my booklet

# REPORT SUMMARY

# CogNet Building an Intelligent System of Insights and Action for 5G Network Management

ID: 671625

From: 1 July 2015 to: 31 December 2017

5G will realise a true Internet of Things, a network capable of supporting potentially trillions of wireless connected devices and with overall bandwidth one thousand times higher that today's wireless networks. Current 4G technology is approaching the limits of what is...

Coordinated in: Ireland

Programme: <u>INDUSTRIAL LEADERSHIP - Leadership in enabling and industrial technologies - Information and Communication Technologies (ICT)</u>, <u>Future Internet:</u>

Software, hardware, Infrastructures, technologies and services

Last update: 8 August 2022

Add to my booklet

### **EPIC EU-Pacific Partnerships for ICT RDI**

ID: 687794

From: 1 February 2017 to: 31 July 2019

The project aims to improve cooperation in the area of information and communication technologies between Europe and three partner countries in the Asia-Pacific (Australia, New Zealand, Singapore). EPIC will foster cooperation in ICT research, technology development and...

Coordinated in: Austria

Programme: INDUSTRIAL LEADERSHIP - Leadership in enabling and industrial

technologies - Information and Communication Technologies (ICT)

Last update: 4 September 2023

Add to my booklet

### Final Report Summary - HOST (High Performance Computing Service Centre)

Executive Summary: The main objective of HOST project was to improve the research capacity and reinforce the scientific and technological potential of the Research Centre in Computer Science of the West University of Timisoara in order to unlock its capacity and make it...

Project: <u>HOST</u> (ID: 284595)

Programme: Specific Programme "Capacities": Research potential of Convergence Regions

Last update: 17 June 2015

Add to my booklet

# <u>Final Report Summary - SESAME (Securing the European Electricity Supply Against Malicious and accidental thrEats)</u>

Threats for the supply of electricity have changed dramatically throughout the last decade: additional to the natural and accidental ones, the new threat of malicious attacks needs to be considered. Such attacks might be jointly imparted so as to affect large...

Project: SESAME (ID: 261696)

Programme: Specific Programme "Cooperation": Security

Last update: 20 May 2015 Add to my booklet

REPORT STIMMARY

# <u>Final Report Summary - SAMURAI (Suspicious and Abnormal Behaviour Monitoring Using a Network of Cameras & Sensors for Situation Awareness Enhancement)</u>

SAMURAI has developed and integrated an innovative intelligent surveillance system for robust monitoring of both inside and surrounding areas of a critical public infrastructure site (an airport terminal). SAMURAI has four significant novelties that make it...

Project: SAMURAI (ID: 217899)

Programme: Specific Programme "Cooperation": Security

Last update: 23 April 2015

Add to my booklet

#### Final Report Summary - ACOMIN (Advanced Computing for Innovation)

The general objective of AComIn is to strengthen the research and innovation capacity of the Institute of Information and Communication Technologies (IICT), Bulgarian Academy of Sciences (BAS) by increasing the knowledge and skills of IICT researchers in advanced areas, by...

Project: ACOMIN (ID: 316087)

Programme: Specific Programme "Capacities": Research potential of Convergence Regions

Last update: 20 July 2016 Add to my booklet

# Periodic Reporting for period 1 - INNOVATE (INtelligeNt ApplicatiOns oVer Large ScAle DaTa StrEams)

Predictive analytics is the key research subject for query-driven applications. Analytics offer the necessary basis for intelligent decision making. Due to the huge volumes of data, analytics could be executed on top of data partitions. Each partition contains only a piece of...

Project: INNOVATE (ID: 745829)

Programme: EXCELLENT SCIENCE - Marie Skłodowska-Curie Actions

Last update: 15 August 2020

Add to my booklet

#### Awareness Inside

Awareness and consciousness have been high on the Artificial Intelligence (AI) research agenda for decades. Progress has been difficult because it has been hard to agree on exactly what it means to be aware. Most researches would agree though that we do not have any truly...

Available languages:

EN

Last update: 20 June 2022 Add to my booklet

# AI4HEALTHSEC A Dynamic and Self-Organized Artificial Swarm Intelligence Solution for Security and Privacy Threats in Healthcare ICT Infrastructures

ID: 883273

From: 1 October 2020 to: 31 December 2023

The increasing interconnection of technology in healthcare between devices at the physical and cyber levels has transformed these infrastructures into large Health Care Information Infrastructures. Such HCIIs are considered critical and sensitive infrastructures due to their... Coordinated in: Italy

Programme: Ensure privacy and freedom, including in the Internet and enhance the societal, legal and ethical understanding of all areas of security, risk and management, Improve cyber security, Secure societies - Protecting freedom and security of Europe and its citizens

Last update: 18 December 2023

Add to my booklet

# Final Report Summary - CRISIS (CRitical Incident management training System using an Interactive Simulation environment)

CRISIS was conceived as a 3D immersive virtual world in which major incidents occur. Trainees are presented with a real-time evolving situation such as a train crash resulting in fires, explosions, increasing casualties and resources distributed around in a...

Project: CRISIS (ID: 242474)

Programme: Specific Programme "Cooperation": Security

Last update: 5 February 2015

Add to my booklet

# ATM application-oriented Research for Artificial Intelligence (AI) for aviation

The SESAR 3 JU has identified the following innovative research elements that could be used to achieve the expected outcomes. The list is not intended to be prescriptive; proposals for work on areas other than those listed below are welcome, provided they include adequate... Available languages:

EN

Last update: 29 June 2022 Add to my booklet

### SPARTA Strategic programs for advanced research and technology in Europe

ID: 830892

From: 1 February 2019 to: 30 June 2022

In the domain of Cybersecurity Research and innovation, European scientists hold pioneering positions in fields such as cryptography, formal methods, or secure components. Yet this excellence on focused domains does not translate into larger-scale, system-level advantages...

Coordinated in: France

Programme: INDUSTRIAL LEADERSHIP - Leadership in enabling and industrial

technologies - Information and Communication Technologies (ICT)

Last update: 11 September 2023

Add to my booklet

# DORNA Development of high reliability motor drives for next generation propulsion applications

ID: 872001

From: 1 March 2020 to: 31 October 2025

This action, entitled "Development of high reliability motor drives for next generation propulsion applications", is a 4-year research focused training program. It is aimed to form a coherent Research and Innovation Staff Exchange network so as to address technical...

Coordinated in: United Kingdom

Programme: <u>EXCELLENT SCIENCE - Marie Skłodowska-Curie Actions</u>, <u>Stimulating innovation by means of cross-fertilisation of knowledge</u>

Last update: 19 December 2023

Add to my booklet

SEQUOIA Robust algorithms for learning from modern data

ID: 724063

From: 1 September 2017 to: 31 August 2023

Machine learning is needed and used everywhere, from science to industry, with a growing impact on many disciplines. While first successes were due at least in part to simple supervised learning algorithms used primarily as black boxes on medium-scale problems,

modern data...

Coordinated in: France

Programme: EXCELLENT SCIENCE - European Research Council (ERC)

Last update: 26 April 2022

Add to my booklet

#### PRISM PRobabilistic PRedictIon for Smart Mobility under stress scenarios

ID: 745673

From: 1 April 2017 to: 31 March 2019

PRISM is about designing, implementing and testing methodologies to better predict transport demand in a city. While plenty solutions exist today for this objective, there is general consensus that, under stress scenarios (e.g. large social events, inclement weather...

Coordinated in: Denmark

Programme: EXCELLENT SCIENCE - Marie Skłodowska-Curie Actions, Nurturing

excellence by means of cross-border and cross-sector mobility

Last update: 15 August 2022

Add to my booklet

CORUS Concept of Operations for EuRopean UTM Systems

ID: 763551

From: 1 September 2017 to: 30 November 2019

The drone business sector is growing rapidly, but in Europe today is held back by the absence of a harmonized approach for the integration of drones into Very Low Level (VLL) airspace. The CORUS (Concept of Operation for EuRopean UTM Systems) project gathers experts from...

Coordinated in: Belgium

Programme: SOCIETAL CHALLENGES - Smart, Green And Integrated Transport, SESAR

JU

Last update: 22 August 2022

Add to my booklet

<u>SafePASS Next generation of life Saving appliances and systems for saFE and swift</u> evacuation operations on high capacity PASSenger ships in extreme scenarios and conditions

ID: 815146

From: 1 September 2019 to: 31 December 2022

Evacuating a large passenger ship is a safety-critical and strictly time-bound task and a complex decision-making process based on the evolving situation and the information available. Timely evacuation requires fast and accurate evaluation of ship's condition and estimation...

Coordinated in: Greece

Programme: SOCIETAL CHALLENGES - Smart, Green And Integrated Transport

Last update: 13 January 2023

Add to my booklet

# <u>eDREAM eDREAM - enabling new Demand REsponse Advanced, Market oriented and Secure technologies, solutions and business models</u>

ID: 774478

From: 1 January 2018 to: 30 June 2021

Smart automated Demand Response (DR) represents a valid alternative to grid reinforement for electricity Distribution System Operators (DSOs) to procure in a cost-effective way the necessary flexibility for integrating larger shares of intermittent RESs, while not compromising...

# Shape-IT Supporting the interaction of Humans and Automated vehicles: Preparing for the EnvIronment of Tomorrow

ID: 860410

From: 1 October 2019 to: 31 March 2024

The overall goal of this ETN is to enable rapid and reliable development of safe and user-centred automated vehicles (AVs) for urban environments. Vehicle automation has been identified as a game-changer in transport, promising substantial reductions in road-traffic fatalities...

Coordinated in: Sweden

Programme: EXCELLENT SCIENCE - Marie Skłodowska-Curie Actions, Fostering new

skills by means of excellent initial training of researchers

Last update: 12 December 2023

Add to my booklet Coordinated in: Italy

Programme: SOCIETAL CHALLENGES - Secure, clean and efficient energy, A single,

smart European electricity grid Last update: 10 March 2023

Add to my booklet

### PHySIS Sparse Signal Processing Technologies for HyperSpectral Imaging Systems

ID: 640174

From: 1 March 2015 to: 28 February 2017

Recent advances in the fields of electronics and optics technology have permitted the design and development of sophisticated hyperspectral imaging sensors, which are able to capture the naturally occurring imaging spectra at a very high spatial resolution forming...

Coordinated in: Greece

Programme: Enabling European competitiveness, non-dependence and innovation of the European space sector, INDUSTRIAL LEADERSHIP - Leadership in enabling and industrial technologies – Space

Last update: 11 August 2022

Add to my booklet

### DART Data-driven AiRcraft Trajectory prediction research

ID: 699299

From: 20 June 2016 to: 19 June 2018

"DART (Data-driven AiRcraft Trajectory prediction research) addresses the topic "ER-02-2015 - Data Science in ATM" exploring the applicability of data science and complexity science techniques to the ATM domain. DART will deliver understanding on the suitability of

Coordinated in: Greece

Programme: Exploratory Research, SOCIETAL CHALLENGES - Smart, Green And

**Integrated Transport** 

Last update: 10 August 2022

Add to my booklet

### CREXDATA Critical Action Planning over Extreme-Scale Data

ID: 101092749

From: 1 January 2023 to: 31 December 2025

The vision of CREXDATA is to develop a generic platform for real-time critical situation management including flexible action planning and agile decision making over streaming data of extreme scale and complexity. CREXDATA develops the algorithmic apparatus,

software...

Coordinated in: Greece

Programme: Digital, Industry and Space, Advanced Computing and Big Data

Last update: 25 November 2022

Add to my booklet

# ILIAD INTEGRATED DigitaL Framework FOR Comprehensive MARITIME DATA AND INFORMATION SERVICES

ID: 101037643

From: 1 February 2022 to: 31 January 2025

ILIAD builds on the assets resulting from two decades of investments in policies and infrastructures for the blue economy and aims at establishing an interoperable, data-intensive, and cost-effective Digital Twin of the Ocean (DTO). It capitalizes on the explosion of new data...

Coordinated in: Belgium

Programme: SOCIETAL CHALLENGES - Food security, sustainable agriculture and

forestry, marine, maritime and inland water research, and the bioeconomy

Last update: 24 January 2024

Add to my booklet

#### IntellIoT Intelligent, distributed, human-centered and trustworthy IoT environments

ID: 957218

From: 1 October 2020 to: 31 January 2024

The traditional cloud centric IoT has clear limitations, e.g. unreliable connectivity, privacy concerns, or high round-trip times. IntellIoT overcomes these challenges in order to enable NG IoT applications. IntellIoT's objectives aim at developing a framework for...

Coordinated in: Germany

Programme: INDUSTRIAL LEADERSHIP - Leadership in enabling and industrial

technologies - Information and Communication Technologies (ICT)

Last update: 27 December 2023

Add to my booklet

#### <u>InFuse Infusing Data Fusion in Space Robotics</u>

ID: 730014

From: 1 November 2016 to: 31 January 2019

InFuse aims to develop very essential data fusion capabilities (aka. Common Data Fusion Framework, or CDFF) that will serve in the context of many space robotics applications, on planetary surface as well as in orbit or other microgravity environments. The InFuse CDFF will be...

Coordinated in: Belgium

Programme: Enabling advances in space technology, INDUSTRIAL LEADERSHIP - Leadership in enabling and industrial technologies – Space, Safeguard and further develop a competitive, sustainable and entrepreneurial space industry and research community and strengthen European non-dependence in space systems, Boost innovation between space and non-space sectors

Last update: 12 August 2022

Add to my booklet

# TED4LAT Twinning in Environmental Data and Dynamical Systems Modelling for Latvia

ID: 101079206

From: 1 October 2022 to: 30 September 2025

TED4LAT is a Coordination and Support Action proposal targeting the overarching objective of the call HORIZON-WIDERA-2021-ACCESS-03-01: Twinning to reach high international standards in research and innovation in Latvia. It will be implemented by twinning two prominent...

Coordinated in: Latvia

Programme: Twinning, Widening participation and spreading excellence

Last update: 10 March 2023

Add to my booklet

# SERRANO TRANSPARENT APPLICATION DEPLOYMENT IN A SECURE, ACCELERATED AND COGNITIVE CLOUD CONTINUUM

ID: 101017168

From: 1 January 2021 to: 31 December 2023

SERRANO's overall ambition is to introduce a novel ecosystem of cloud-based technologies, spanning from specialized hardware resources up to software toolsets. This will enable application-specific service instantiation and optimal customizations based on the workloads to be...

Coordinated in: Greece

Programme: INDUSTRIAL LEADERSHIP - Leadership in enabling and industrial

technologies - Information and Communication Technologies (ICT)

Last update: 5 January 2024

Add to my booklet

# PLIADES AI-Enabled Data Lifecycles Optimization and Data Spaces Integration for Increased Efficiency and Interoperability

ID: 101135988

From: 1 January 2024 to: 30 June 2027

PLIADES advances the SoA dataspaces reference architectures, towards a step change on the use of data as key enabler of technological advances in AI and Robotics. To this end,

PLIADES researches into novel, AI-enabled tools to advance full data life cycles integration, both...

oom...

Coordinated in: Greece

Programme: Digital, Industry and Space, Artificial Intelligence and Robotics

Last update: 3 November 2023

Add to my booklet

OpenContinuum An Open Ecosystem for European strategic autonomy and interoperability across the computing continuum industry

ID: 101070030

From: 1 September 2022 to: 31 August 2024

OpenContinuum addresses the coordination and support of the Cloud-Edge-IoT domain, with a specific thematic focus on the supply-side of the computing continuum landscape. An integrated, open ecosystem built around Open Source, Open Standards, and the effective blending of the...

Coordinated in: Netherlands

Programme: Digital, Industry and Space, Advanced Computing and Big Data

Last update: 5 August 2022

Add to my booklet

#### PERFORM Pioneering the Digital Future for Omnichannel Retail Managers

ID: 765395

From: 1 January 2018 to: 31 December 2022

The overall goal of PERFORM is to establish a European training network to prepare the next generation of Digital Retail Managers. Established Business Models need to be revised as customer behaviour is changing. Customers no longer prefer online or instore purchasing but...

Coordinated in: Ireland

Programme: EXCELLENT SCIENCE - Marie Skłodowska-Curie Actions, Fostering new

skills by means of excellent initial training of researchers

Last update: 10 October 2023

Add to my booklet

### VICTEC Virtual ICT with Empathic Characters

ID: IST-2001-33310

From: 1 February 2002 to: 31 January 2005

VICTEC addresses the emotional and empathic aspects of the learning process, in particular focusing on Personal and Social Education (PSE). It applies a new technology embodied in a synthetic characters toolkit, supporting the creation of believable synthetic characters in a ...

Coordinated in: United Kingdom

Programme: Programme for research, technological development and demonstration on a

"User-friendly information society, 1998-2002"

Last update: 13 June 2005 Add to my booklet

#### INNOVATE INtelligeNt ApplicatiOns oVer Large ScAle DaTa StrEams

ID: 745829

From: 1 April 2018 to: 31 March 2020

Large scale data analytics is the key research domain for future data driven applications as numerous of devices produce huge volumes of data in the form of streams. Analytics services can offer the necessary basis for building intelligent decision making mechanisms to support...

Coordinated in: United Kingdom

Programme: EXCELLENT SCIENCE - Marie Skłodowska-Curie Actions, Nurturing

excellence by means of cross-border and cross-sector mobility

Last update: 17 August 2022

Add to my booklet

# AGENT ACADEMY AGENT ACADEMY: A Data Mining Framework for Training

Intelligent Agents
ID: IST-2000-31050

From: 1 November 2001 to: 30 April 2004

Intelligent Agent technology, coupled with Data Mining and Knowledge Discovery promise to dramatically affect the way humans interact with computers. The main goal of this project is to develop Agent Academy, an integrated environment for embedding intelligence in newly create...

Coordinated in: Greece

Programme: Programme for research, technological development and demonstration on a

"User-friendly information society, 1998-2002"

Last update: 27 April 2012

Add to my booklet

### AI4REASON Artificial Intelligence for Large-Scale Computer-Assisted Reasoning

ID: 649043

From: 1 September 2015 to: 31 October 2020

The goal of the AI4REASON project is a breakthrough in what is considered a very hard problem in AI and automation of reasoning, namely the problem of automatically proving theorems in large and complex theories. Such complex formal theories arise in projects aimed at...

Coordinated in: Czechia

Programme: EXCELLENT SCIENCE - European Research Council (ERC)

Last update: 18 August 2022

Add to my booklet

### AVENUE Autonomous Vehicles to Evolve to a New Urban Experience

ID: 769033

From: 1 May 2018 to: 31 October 2022

AVENUE aims to design and carry out full scale demonstrations of urban transport automation by deploying, for the first time worldwide, fleets of autonomous mini-buses in low to medium demand areas of 4 European demonstrator cities: Geneva, Lyon, Copenhagen and Luxembourg, and...

Coordinated in: Switzerland

Programme: SOCIETAL CHALLENGES - Smart, Green And Integrated Transport

Last update: 1 February 2024

Add to my booklet

# HERON Improved Robotic Platform to perform Maintenance and Upgrading Roadworks: The HERON Approach

ID: 955356

From: 1 June 2021 to: 31 May 2025

HERON aims to develop an integrated automated system to perform maintenance and upgrading roadworks, such as sealing cracks, patching potholes, asphalt rejuvenation, autonomous replacement of CUD elements and painting markings, but also supporting the pre/post-intervention...

Coordinated in: Greece

Programme: SOCIETAL CHALLENGES - Smart, Green And Integrated Transport

Last update: 27 December 2023

Add to my booklet

<u>FAITH Fostering Artificial Intelligence Trust for Humans towards the optimization of</u> trustworthiness through large-scale pilots in critical domains

ID: 101135932

From: 1 January 2024 to: 31 December 2027

The increasing requirement for trustworthy AI systems across diverse application domains has become a pressing need not least due to the critical role that AI plays in the ongoing digital transformation addressing urgent socio-economic needs. Despite the numerous...

Coordinated in: Greece

Programme: Digital, Industry and Space, Artificial Intelligence and Robotics

Last update: 3 November 2023

Add to my booklet

#### AGILE Adoptive Gateways for dIverse muLtiple Environments

ID: 688088

From: 1 January 2016 to: 31 December 2018

AGILE project aims to create an open, flexible and widely usable IoT solution at disposal of industries (startups, SMEs, tech companies) and individuals (researchers, makers, entrepreneurs) as a framework that consists of:• A modular IoT gateway enabling various types of...

Coordinated in: Italy

Programme: INDUSTRIAL LEADERSHIP - Leadership in enabling and industrial

technologies - Information and Communication Technologies (ICT)

Last update: 16 August 2022

Add to my booklet

### FACE FACE: A real-time facial analysis software to improve the skincare e-commerce.

ID: 885806

From: 1 December 2019 to: 30 April 2020

FACE is the first personal real-time facial analyser capable to generate personalised therapeutic strategies and wellbeing recommendations based on the combination of artificial intelligence (AI) and medical expert algorithms. FACE software is a disruptive AI facial checker...

Coordinated in: Spain

Programme: PRIORITY 'Societal challenges, INDUSTRIAL LEADERSHIP - Innovation In SMEs, INDUSTRIAL LEADERSHIP - Leadership in enabling and industrial technologies

Last update: 17 August 2022

Add to my booklet

<u>PerformB Innovative digital platform based on machine learning to analyze large databases, aggregate them and provide results to questions made in natural language.</u>

ID: 832155

From: 1 November 2018 to: 28 February 2019

Inclusive and sustainable industrial development is the primary source of income generation, allows for rapid and sustained increases in living standards for all people, and provides the technological solutions to environmentally sound industrialization. Without technology and...

Coordinated in: Italy

Programme: PRIORITY 'Societal challenges, INDUSTRIAL LEADERSHIP - Innovation In SMEs, INDUSTRIAL LEADERSHIP - Leadership in enabling and industrial technologies

Last update: 11 August 2022

Add to my booklet

#### LICONAMCO Light-controlled nanomagnetic computation schemes

ID: 844304

From: 1 October 2019 to: 30 November 2021

Computation using nanomagnets could serve as a low-power alternative to existing CMOS technologies. Here, binary information is encoded into two stable magnetic configurations of single-domain nanomagnets. In the last ten years, significant progress has been made towards the...

Coordinated in: Spain

Programme: EXCELLENT SCIENCE - Marie Skłodowska-Curie Actions, Nurturing

excellence by means of cross-border and cross-sector mobility

Last update: 19 May 2022 Add to my booklet

# SPIKEPro SPIKING PHOTONIC-ELECTRONIC IC FOR QUICK AND EFFICIENT PROCESSING

ID: 101129904

From: 1 March 2024 to: 29 February 2028

Rapid advances in artificial intelligence technologies have led to powerful models and algorithms that have revolutionized many applications across all fields of science and technology. Deep learning performed within artificial neural networks has yielded new ways to process...

Coordinated in: Netherlands

Programme: The European Innovation Council (EIC)

Last update: 7 November 2023

Add to my booklet

## SoMa Soft-bodied intelligence for Manipulation

ID: 645599

From: 1 May 2015 to: 30 April 2019

The main obstacle to a wide-spread adoption of advanced manipulation systems in industry is their complexity, fragility, lack of strength, and difficulty of use. This project describes a path of disruptive innovation for the development of simple, compliant, yet strong...

Coordinated in: Germany

Programme: INDUSTRIAL LEADERSHIP - Leadership in enabling and industrial technologies - Information and Communication Technologies (ICT), Advanced interfaces and robots: Robotics and smart spaces

Last update: 5 September 2023

Add to my booklet

#### ARTICONF smART socIal media eCOsytstem in a blockchaiN Federated environment

ID: 825134

From: 1 January 2019 to: 30 June 2022

Social media platforms are key technologies for next generation connectivity. Social media platforms have the potential to shape and mobilise patterns of communication, practices of exchange and business, creation, learning and knowledge acquisition. Typically, social media...

Coordinated in: Austria

Programme: INDUSTRIAL LEADERSHIP - Leadership in enabling and industrial

technologies - Information and Communication Technologies (ICT)

Last update: 9 December 2022

Add to my booklet

DDOIFCT

#### TruBlo Trusted and reliable content on future blockchains

ID: 957228

From: 1 September 2020 to: 30 November 2023

Trust is essential to societies, and blockchain has the potential to shift trust in people and institutions to trust in technology. This view is in line with the recent emergence of less centralised paradigms for trust, that can offer concepts and techniques for efficiently...

Coordinated in: Spain

Programme: INDUSTRIAL LEADERSHIP - Leadership in enabling and industrial

technologies - Information and Communication Technologies (ICT)

Last update: 22 January 2024

Add to my booklet

# INGENET Networked industrial design and control applications using genetics algorithms and evolution strategies

ID: BRRT975034

From: 15 November 1997 to: 14 May 2002

INGENET NETWORK OVERVIEW The increasing complexity of design in Aeronautic, Automotive and Energy Industries requires more and more robust optimisation and control tools for solving simultaneously discrete, continuous and combinatorial difficult problems unresolved until no...

Coordinated in: France

Programme: Specific research and technological development programme in the field of

industrial and materials technologies, 1994-1998

Last update: 16 March 1998

Add to my booklet

### **ILP Inductive Logic Programming**

ID: 6020

From: 1 September 1992 to: 31 August 1995

The main long term technical goal of the ILP project is to upgrade the techniques of the classical empirical learning paradigm to a logic programming framework. In this way ILP aims to overcome the two main limitations of classical empirical or similarity based learning algori...

Coordinated in: Belgium

Programme: Specific research and technological development programme (EEC) in the field

of information technologies, 1990-1994

Last update: 5 April 2023 Add to my booklet

### MASLOG Formal methods for multi-agents systems

ID: 21669

From: 1 August 2006 to: 31 January 2008

The multi-agent paradigm is emerging as a promising new programming approach with the goal of providing computing and communication services to the user on the basis of autonomous component-based processes. One of the major challenges in the multi-agent systems (MAS) area conc...

Coordinated in: France

Programme: <u>Human resources and Mobility in the specific programme for research, technological development and demonstration "Structuring the European Research Area"</u> under the Sixth Framework Programme 2002-2006

Last update: 5 April 2023 Add to my booklet

<u>SafeOPS From Prediction to Decision Support - Strengthening Safe and Scalable ATM Services through Automated Risk Analytics based on Operational Data from Aviation Stakeholders</u>

ID: 892919

From: 1 January 2021 to: 31 December 2022

Maintaining safety and cost-efficiency of air transport operations while increasing the capacity will push the next generation of ATM systems towards digitalization. In the midterm, a digitalized system in the human operated ATM environment will be capable of delivering...

Coordinated in: Germany

Programme: SOCIETAL CHALLENGES - Smart, Green And Integrated Transport, SESAR

<u>JU</u>

Last update: 4 July 2023 Add to my booklet

AERO-TRAIN AErial RObotic TRAINing for the next generation of European infrastructure and asset maintenance technologies

ID: 953454

From: 1 January 2021 to: 31 December 2024

AERO-TRAIN fills gaps between the infrastructure O&M industry and Industry4.0 with the ambition to keep our invaluable assets operational and safe. The AERO-TRAIN general objectives are, in fact, to reduce the costs associated to O&M operations, while increasing the safety...

Coordinated in: Denmark

Programme: EXCELLENT SCIENCE - Marie Skłodowska-Curie Actions, Fostering new

skills by means of excellent initial training of researchers

Last update: 27 December 2023

Add to my booklet

#### CERENA Developing Intelligent Personal Service Environments

ID: IST-1999-10039

From: 1 January 2000 to: 31 December 2001

Relationship marketing is mostly used as a paradigm to support interaction between individuals and organisations, most prominently manifested in traditional retailing business via so-called "loyalty" cards. These methods do not always meet the needs of the individual and the o...

Coordinated in: Germany

Programme: Programme for research, technological development and demonstration on a

"User-friendly information society, 1998-2002"

Last update: 13 June 2005 Add to my booklet

RECIPE REliable power and time-ConstraInts-aware Predictive management of heterogeneous Exascale systems

ID: 801137

From: 1 May 2018 to: 31 October 2021

The current HPC facilities will need to grow by an order of magnitude in the next few years to reach the Exascale range. The dedicated middleware needed to manage the enormous complexity of future HPC centers, where deep heterogeneity is needed to handle the wide variety of...

Coordinated in: Italy

Programme: EXCELLENT SCIENCE - Future and Emerging Technologies (FET), FET

Proactive

Last update: 10 September 2022

Add to my booklet

#### Dispatcher3 Innovative processing for flight practices

ID: 886461

From: 1 June 2020 to: 30 November 2022

"Dispatcher3 will develop a software prototype for the acquisition and preparation of historical flight data in order to give support to the optimisation of future flights providing predictive capabilities and advice to dispatchers and pilots. This will be done considering...

Coordinated in: United Kingdom

Programme: SOCIETAL CHALLENGES - Smart, Green And Integrated Transport, ITD

**Systems** 

Last update: 18 December 2023

Add to my booklet

#### Fed4FIREplus Federation for FIRE Plus

ID: 732638

From: 1 January 2017 to: 30 June 2022

The Fed4FIRE+ project has the objective to run and further improve Fed4FIRE's "best-intown" federation of experimentation facilities for the Future Internet Research and Experimentation initiative. Federating a heterogeneous set of facilities covering technologies...

Coordinated in: Belgium

Programme: INDUSTRIAL LEADERSHIP - Leadership in enabling and industrial

technologies - Information and Communication Technologies (ICT)

Last update: 5 February 2024

Add to my booklet

ID: 715872

From: 1 March 2017 to: 31 August 2023

Cognitive tasks are increasingly necessary in modern electronics. The energy efficiency of associated algorithms, which rely on abundant stored parameters, is severely limited by the separation of computation and memory elements in conventional computers. In

NANOINFER, I will... Coordinated in: France

Programme: <u>EXCELLENT SCIENCE - European Resea</u>rch Council (ERC)

Last update: 23 August 2022

Add to my booklet

#### GAMMA-MRI gamma-MRI: the future of molecular imaging

ID: 964644

From: 1 April 2021 to: 30 September 2024

Gamma-MRI will develop a clinical molecular imaging device based on the physical principle of anisotropic gamma emission from hyperpolarised metastable xenon. In the strategic move from "one size fits all" to personalised medicine, molecular imaging plays an essential...

Coordinated in: Switzerland

Programme: EXCELLENT SCIENCE - Future and Emerging Technologies (FET), FET Open

Last update: 2 January 2024

Add to my booklet

### OPRECOMP Open transPREcision COMPuting

ID: 732631

From: 1 January 2017 to: 31 December 2020

Guaranteed numerical precision of each elementary step in a complex computation has been the mainstay of traditional computing systems for many years. This era, fueled by Moore's law and the constant exponential improvement in computing efficiency, is at its twilight: from...

Coordinated in: Switzerland

Programme: EXCELLENT SCIENCE - Future and Emerging Technologies (FET), FET

Proactive

Last update: 23 August 2022

Add to my booklet

FISHY A coordinated framework for cyber resilient supply chain systems over complex ICT infrastructures

ID: 952644

From: 1 September 2020 to: 31 August 2023

Project FISHY aims at designing, developing, validating and demonstrating a coordinated framework for cyber resilience provisioning to guarantee a trusted supply chain of ICT systems, built upon distributed, dynamic, and often fundamentally insecure and heterogeneous ICT...

Coordinated in: Spain

Programme: INDUSTRIAL LEADERSHIP - Leadership in enabling and industrial

technologies - Information and Communication Technologies (ICT)

Last update: 28 December 2023

Add to my booklet

# TRAINSFARE SMART TOOL TO PROTECT PUBLIC TRANSPORT REVENUES, ASSETS, PASSENGERS AND MOBILITY

ID: 767807

From: 1 May 2017 to: 31 October 2020

TRAINSFARE's main objective is to help reduce fare evasion on public transport, which causes revenue losses in excess of €2.9bn/year in Europe alone. To tackle fare evasion public transport operators use random ticket inspections with variable success. This method...

Coordinated in: Spain

Programme: SOCIETAL CHALLENGES - Smart, Green And Integrated

<u>Transport, INDUSTRIAL LEADERSHIP - Leadership in enabling and industrial technologies - Information and Communication Technologies (ICT), Mainstreaming SME support,</u>

especially through a dedicated instrument

Last update: 18 August 2022

Add to my booklet

**COMPULOG Computational Logic** 

ID: 1667

From: 1 April 1989 to: 31 March 1992

This Action aimed to develop the foundations of an integrated logic-based software environment for developing knowledge-rich applications. Such an environment should include a language suitable for databases, programming and problem-solving together with logic-based tools for ...

Coordinated in: United Kingdom

Programme: European strategic programme (EEC) for research and development in

information technologies (ESPRIT), 1987-1992

Last update: 5 April 2023 Add to my booklet

# SWIFT SPECIFICATION FOR WORKING POSITIONS IN FUTURE AIR TRAFFIC CONTROL

ID: 81011501

From: 1 March 1992 to: 1 September 1994

This project will combine medium and long term operational evolutionary definition and technical studies, in order to design the future control suite and its basic component, the CWPs.

Coordinated in: France

Programme: Specific research and technological development programme (EEC) in the field

of transport (EURET), 1990-1993 Last update: 18 November 1992

Add to my booklet

# WAI-Tools Advanced Decision Support Tools for Scalable Web Accessibility Assessments

ID: 780057

From: 1 November 2017 to: 31 January 2021

WAI-Tools, Advanced Decision Support Tools for Scalable Web Accessibility Assessments, drives innovation with sustainable impact on the entire field of web accessibility evaluation and repair through:• Building on the on-going international standardisation efforts on web...

Coordinated in: France

Programme: INDUSTRIAL LEADERSHIP - Leadership in enabling and industrial

technologies - Information and Communication Technologies (ICT)

Last update: 22 August 2022

Add to my booklet

### TANGO Digital Technologies ActiNg as a Gatekeeper to information and data flOws

ID: 101070052

From: 1 September 2022 to: 31 August 2025

TANGO will establish a stronger cross-sector data sharing, in a citizen-centric, secure and trustworthy manner, by developing innovative solutions while addressing environmental degradation and climate change challenges. The overall outcome is a novel platform exhibiting the...

Coordinated in: Spain

Programme: Digital, Industry and Space, Advanced Computing and Big Data

Last update: 13 September 2022

Add to my booklet

#### Safe-DEED Safe Data Enabled Economic Development

ID: 825225

From: 1 December 2018 to: 30 November 2021

As privacy and trust remain key in the data sharing debate, Privacy enhancing technologies (PET) will play a prominent role by 2025. Safe-DEED takes a highly interdisciplinary approach, bringing together partners from cryptography, data science, business innovation, and legal...

Coordinated in: Austria

Programme: INDUSTRIAL LEADERSHIP - Leadership in enabling and industrial

technologies - Information and Communication Technologies (ICT)

Last update: 26 July 2022 Add to my booklet

### MASTER Multiple ASpects TrajEctoRy management and analysis

ID: 777695

From: 1 March 2018 to: 31 December 2023

An ever-increasing number of diverse, real-life applications, ranging from mobile phone calls to social media and land, sea, and air surveillance systems, produce massive amounts of spatio-temporal data representing trajectories of moving objects. Trajectories, commonly...

Coordinated in: Italy

Programme: EXCELLENT SCIENCE - Marie Skłodowska-Curie Actions, Stimulating

innovation by means of cross-fertilisation of knowledge

Last update: 8 December 2023

Add to my booklet

# VISIONS Neural Video Processing and Streaming for Real-time Traffic Monitoring

ID: 898588

From: 1 August 2021 to: 31 July 2023

With the rapid development of urbanization and continuous increase of vehicles on roadways, Intelligent Transportation Systems (ITS) play a key role in revolutionizing the way people commute. To make our cities safer and smarter, real-time traffic monitoring systems are...

Coordinated in: United Kingdom

Programme: EXCELLENT SCIENCE - Marie Skłodowska-Curie Actions, Nurturing

excellence by means of cross-border and cross-sector mobility

Last update: 28 December 2023

Add to my booklet

#### I-VALVE INTELLIGENT VALVE FOR PERSONALIZED SAFETY AIRBAG

ID: 763024

From: 1 February 2017 to: 31 July 2017

According with the World Health organization(WHO) every year the lives of approximately 1.25 million people are cut short as a result of a road traffic crash. Between 20 and 50 million more people suffer non-fatal injuries, with many incurring a disability as a result of their...

Coordinated in: Spain

Programme: SOCIETAL CHALLENGES - Smart, Green And Integrated

Transport, INDUSTRIAL LEADERSHIP - Leadership in enabling and industrial technologies

- Information and Communication Technologies (ICT), Mainstreaming SME support,

especially through a dedicated instrument

Last update: 11 August 2022

Add to my booklet

PROJECT

# Intranetum Disrupting the Way We Store and Search for Files, Replacing The Folder-Based With a Context- Based Filing Paradigm.

ID: 743997

From: 1 January 2017 to: 30 June 2017

Knowledge workers such as lawyers or software engineers spend 16% of their time searching for information. Over 50% of the times, they do not find exactly what they are looking for. A lot of this time is wasted by employees using solutions that ask "where" the information...

Coordinated in: Spain

Programme: INDUSTRIAL LEADERSHIP - Leadership in enabling and industrial technologies - Information and Communication Technologies (ICT), Mainstreaming SME support, especially through a dedicated instrument

Last update: 5 August 2022

Add to my booklet

# PROCONTRA Smart-Contract Protocols: Theory for Applications

ID: 885666

From: 1 January 2021 to: 31 December 2025

Smart contracts are formal agreements that take the form of computer programs. They are typically written down, and automatically executed, on blockchains. Smart-contract protocols are algorithms that describe how these contracts operate in multiparty settings. Due to the...

Coordinated in: Poland

Programme: EXCELLENT SCIENCE - European Research Council (ERC)

Last update: 13 June 2023 Add to my booklet

# SPINAPSE Creating complexity: toward atomic spin-based neural hardware

ID: 818399

From: 1 March 2019 to: 28 February 2025

The growing trend in global electricity consumption has created a new challenge for materials-based science: to find computational paradigms toward ICT that are not only smaller and faster, but also energy-efficient. A new source of inspiration is the human brain, which...

Coordinated in: Netherlands

Programme: EXCELLENT SCIENCE - European Research Council (ERC)

Last update: 31 December 2022

Add to my booklet

#### MICS Multiphoton imaging with computational specificity

ID: 101103200

From: 1 June 2023 to: 31 May 2025

Digital staining based on machine learning models can provide cellular specificity to label-free optical imaging. This concept is particularly interesting for in vivo applications in fundamental research of auto-immune diseases as well as for future clinical translations. In...

Coordinated in: Germany

Programme: Marie Skłodowska-Curie Actions (MSCA)

Last update: 28 June 2023 Add to my booklet

### LEMUR Learning with Multiple Representations

ID: 101073307

From: 1 January 2023 to: 31 December 2026

Machine learning methods operate on formal representations of the data at hand and the models or patterns induced from the data. They also assume a suitable formalization of the learning task itself (e.g., as a classification problem), including a specification of the...

Coordinated in: Germany

Programme: Marie Skłodowska-Curie Actions (MSCA)

Last update: 4 September 2022

Add to my booklet

<u>HiEFFICIENT Highly EFFICIENT and reliable electric drivetrains based on modular, intelligent and highly integrated wide band gap power electronics modules</u>

ID: 101007281

From: 1 May 2021 to: 31 October 2024

The European "Green Deal" initiative by the EU commission strives for sustainable mobility and efficient use of resources. Within HiEFFICIENT the project partners will work towards these goals and will develop the next generation of wide band-gap semiconductors (WBG)

in...

Coordinated in: Austria

Programme: ECSEL, INDUSTRIAL LEADERSHIP - Leadership in enabling and industrial

technologies - Information and Communication Technologies (ICT)

Last update: 22 January 2024

Add to my booklet

### 5G-VINNI 5G Verticals INNovation Infrastructure

ID: 815279

From: 1 July 2018 to: 31 December 2021

5G-VINNI will accelerate the uptake of 5G in Europe by providing an end-to-end (E2E) facility that validates the performance of new 5G technologies by operating trials of advanced vertical sector services. The 5G-VINNI strategy to achieve this involves: (1) Designing the most...

Coordinated in: Norway

Programme: INDUSTRIAL LEADERSHIP - Leadership in enabling and industrial

technologies - Information and Communication Technologies (ICT)

Last update: 11 December 2023

Add to my booklet

#### capito Making information understandable for everyone

ID: 190167125

From: 1 March 2022 to: 31 January 2024

CFS Consulting, Franchise & Sales GmbH, founded as a role model for combining social impact and entrepreneurship, is specialised in language simplification and accessible information. Our leading brand capito creates a disruptive AI-based text simplification system, which...

Coordinated in: Austria

Programme: The Accelerator, The European Innovation Council (EIC)

Last update: 24 August 2022

Add to my booklet

PriMO-5G Virtual Presence in Moving Objects through 5G

ID: 815191

From: 1 July 2018 to: 30 June 2021

The PriMO-5G project addresses the area of "a) Focus on mmWave and super broadband services" in the call "EUK-02-2018: 5G" of the Horizon 2020 Work Program 2018-2020. The main aim of the PriMO-5G project is to demonstrate an end-to-end 5G system providing immersive...

Coordinated in: Finland

Programme: INDUSTRIAL LEADERSHIP - Leadership in enabling and industrial

technologies - Information and Communication Technologies (ICT)

Last update: 28 September 2022

Add to my booklet

### OEMC Open-Earth-Monitor Cyberinfrastructure

ID: 101059548

From: 1 June 2022 to: 31 May 2026

The Open-Earth-Monitor Cyberinfrastructure will increase European capability to generate timely, accurate, disaggregated, people-centred, accessible (GSM-compatible) and user-friendly environmental information based on Earth Observation data. We will achieve this by building a...

Coordinated in: Netherlands

Programme: Food, Bioeconomy Natural Resources, Agriculture and

Environment, Environmental Observation

Last update: 4 September 2022

Add to my booklet

# NECOS Novel Enablers for Cloud Slicing

ID: 777067

From: 1 November 2017 to: 31 October 2019

The NECOS project addresses the limitations of current cloud computing infrastructures to respond to the demand of new services, as presented in two use-cases that will drive the whole execution of the project. The first use-case is Telco service provider focussed and is...

Coordinated in: Spain

Programme: INDUSTRIAL LEADERSHIP - Leadership in enabling and industrial

technologies - Information and Communication Technologies (ICT)

Last update: 17 August 2022

Add to my booklet

# FACILE FAST AND ACCURATE CATEGORISATION OF INFORMATION BY LANGUAGE ENGINEERING

ID: LE12440

From: 1 December 1995 to: 30 November 1997

FACILE focuses on a pilot system to handle message dispatching and routing of texts within financial establishments, such as banks or trading companies. The system, which integrates shallow and deep text analysis techniques, supported by a rich domain model and a powerful pre-...

Coordinated in: Italy

Programme: Specific programme of research and technological development and demonstration in the area of telematic applications of common interest, 1994-1998

Last update: 20 August 1999

Add to my booklet

### FlexNets Quantifying Flexibility in Communication Networks

ID: 647158

From: 1 September 2015 to: 28 February 2021

Communication networks have emerged to become the basic infrastructure for all areas of our society with application areas ranging from social media to industrial production and healthcare. New requirements include the need for dynamic changes of the required resources,

for...

Coordinated in: Germany

Programme: EXCELLENT SCIENCE - European Research Council (ERC)

Last update: 22 August 2022

Add to my booklet

# Algorithmic tools for efficient scheduling in parallel computing environments

ID: FMBI950161

From: 15 January 1996 to: 14 January 1997

The objective of this project is to develop a set of efficient techniques and algorithmic tools for scheduling in parallel systems, towards a general purpose use of parallel computing. An integrated approach is proposed that incorporate three crucial factors affecting the k...

Coordinated in: Greece

Programme: Specific research and technological development programme in the field of the

training and mobility of researchers, 1994-1998

Last update: 3 May 1996 Add to my booklet

# **SPIRIT The Spirit Workstation**

ID: 2484

From: 5 December 1988 to: 4 December 1992

The SPIRIT workstation project aims to design and build a high-performance technical workstation to support computationally demanding activities in computer-aided engineering, image processing, graphical interaction, knowledge-based systems, modelling and simulation, and the d...

Coordinated in: Germany

Programme: European strategic programme (EEC) for research and development in

information technologies (ESPRIT), 1987-1992

Last update: 17 June 1994 Add to my booklet

# PANDA Collaborative Process Automation Support using Service Level Agreements and Intelligent dynamic Agents in SME clusters

ID: 027169

From: 1 January 2006 to: 30 June 2008

PANDA aims to speed up the integration process in the European ERP/CRM industry, by developing an advanced set of conceptual components and e-services dedicated to: (i) address current inefficiencies in the ERP/CRM value chain (ERP/CRM vendors, national representatives, consul...

Coordinated in: Greece

Programme: <u>Information Society Technologies</u>: thematic priority under the specific programme "Integrating and strengthening the European research area" (2002-2006).

Last update: 2 May 2007

#### ANNEX V

#### AI-ENABLED ETHICAL, LEGAL AND SOCIAL DISCIPLINES

# MAIA Multifunctional, adaptive and interactive AI system for Acting in multiple contexts ID: 951910

From: 1 January 2021 to: 30 June 2025

What if in a near future Artificial Intelligence (AI) becomes human-centric, focusing on human needs and build trustworthiness by mutual understanding? Today, millions of people worldwide suffer from deteriorated motor abilities, due to stroke, brain tumor surgery or accident...

Coordinated in: Italy

Programme: EXCELLENT SCIENCE - Future and Emerging Technologies (FET), FET

Proactive

Last update: 22 January 2024

Add to my booklet

### WeNet WeNet - The Internet of US

ID: 823783

From: 1 January 2019 to: 30 June 2023

"Diversity permeates our everyday life and covers many dimensions, such as competence, culture, gender or economic across humans and social relations. Technology has evolved to a point where humans from diverse backgrounds, cultures, and experiences have an unprecedented...

Coordinated in: Italy

Programme: EXCELLENT SCIENCE - Future and Emerging Technologies (FET), FET

Proactive

Last update: 2 January 2024

Add to my booklet

# TAILOR Foundations of Trustworthy AI - Integrating Reasoning, Learning and Optimization

ID: 952215

From: 1 September 2020 to: 31 August 2024

Artificial Intelligence (AI) and all the key digital technologies that are subsumed by the term AI today are an essential part of the answers to many of the daunting challenges that we are facing. AI will impact the everyday lives of citizens as well as all business sectors...

Coordinated in: Sweden

Programme: INDUSTRIAL LEADERSHIP - Leadership in enabling and industrial

technologies - Information and Communication Technologies (ICT)

Last update: 5 February 2024

Add to my booklet

### TRUST-AI Transparent, Reliable and Unbiased Smart Tool for AI

ID: 952060

From: 1 October 2020 to: 31 March 2025

Artificial intelligence is single-handedly changing decision-making at different levels and sectors in often unpredictable and uncontrolled ways. Due to their black-box nature, existing models are difficult to interpret, and hence trust. Explainable AI is an emergent field...

Coordinated in: Portugal

Programme: EXCELLENT SCIENCE - Future and Emerging Technologies (FET), FET

Proactive

Last update: 15 January 2024

Add to my booklet

### AutoFair Human-Compatible Artificial Intelligence with Guarantees

ID: 101070568

From: 1 October 2022 to: 30 September 2025

In this proposal, we address the matter of transparency and explainability of AI using approaches inspired by control theory. Notably, we consider a comprehensive and flexible certification of properties of AI pipelines, certain closed-loops and more complicated...

Coordinated in: Czechia

Programme: Digital, Industry and Space, Artificial Intelligence and Robotics

Last update: 4 September 2022

Add to my booklet

# <u>Periodic Reporting for period 1 - NL4XAI (Interactive Natural Language Technology for Explainable Artificial Intelligence)</u>

The aim of this four-year European project is to use natural language to generate explanations for decisions made by an Artificial Intelligence (AI) system, which are understandable to non-expert users. According to Polanyi's paradox, humans know more than they can explain...

Project: NL4XAI (ID: 860621)

Programme: EXCELLENT SCIENCE - Marie Skłodowska-Curie Actions

Last update: 2 March 2022

Add to my booklet

# INTENT Intelligent Instruments: Understanding 21st-Century AI Through Creative Music Technologies

ID: 101001848

From: 1 September 2021 to: 31 August 2026

Artificial Intelligence is becoming increasingly human-like and it is now proficient in a key human activity: musical creativity. But what does this mean? How does creative AI change our notions of art, culture and society? As new machine learning technologies begin to mirror...

Coordinated in: Iceland

Programme: EXCELLENT SCIENCE - European Research Council (ERC)

Last update: 19 August 2022

Add to my booklet

# PROJECT PROJECT REPORT SUMMARY

### Periodic Reporting for period 1 - AIRE (Artificial Intelligence for Recruitment Europe)

AIRE – Artificial Intelligence for Recruiting Europe introduces a world 1st personal robot (AIREbot) to help every European citizen apply for jobs, update their skills, register for courses and arrange interviews. The project has demonstrated that it can Reduce EU vacancies...

Project: AIRE (ID: 782921)

Programme: SOCIETAL CHALLENGES - Europe In A Changing World - Inclusive,

**Innovative And Reflective Societies** 

Last update: 7 June 2018 Add to my booklet

#### REPORT SUMMARY

# AI4LABOUR Reshaping labour force participation with Artificial Intelligence

ID: 101007961

From: 1 November 2021 to: 31 October 2025

In the last decade, due to the tremendous progress of computing power, a new era which is called Industry 4.0 has been triggered. This new revolutionary progress in manufacturing systems will also create a huge impact on the socio-economic dynamics of society. Moreover, very...

Coordinated in: Türkiye

Programme: EXCELLENT SCIENCE - Marie Skłodowska-Curie Actions, Stimulating

innovation by means of cross-fertilisation of knowledge

Last update: 5 February 2024

Add to my booklet

Improved knowledge graphs key to working with artificial intelligence data more

efficiently

Project: <u>ENEXA</u> (ID: 101070305)

Programme: Digital, Industry and Space

Available languages: DEENESFRITPL

Last update: 21 November 2022

#### REPORT SLIMMARY

Programme: Specific Programme "Cooperation": Nanosciences, Nanotechnologies, Materials

and new Production Technologies
Last update: 18 December 2017

Add to my booklet

### Final Report Summary - LEILA (Law Enforcement Intelligence Learning Application)

The LEILA project aims to provide law enforcement organizations with an innovative learning methodology through the development of engaging learning experiences and gaming solutions designed specifically for the learning needs of the civil security intelligence analysis...

Project: LEILA (ID: 608303)

Programme: Specific Programme "Cooperation": Security

Last update: 7 April 2017

Add to my booklet

### CoHuBiCoL Counting as a Human Being in the Era of Computational Law

ID: 788734

From: 1 January 2019 to: 31 December 2023

This project will investigate how the prominence of counting and computation transforms many of the assumptions, operations and outcomes of the law. It targets two types of computational law: artificial legal intelligence or data-driven law (based on machine learning), and...

Coordinated in: Belgium

Programme: EXCELLENT SCIENCE - European Research Council (ERC)

Last update: 10 March 2023

Add to my booklet

# Final Report Summary - TEPSIE (The theoretical, empirical and policy foundations for building social innovation in Europe)

The field of social innovation is developing rapidly all over the world, with new institutions, methods and activities. More systematic innovation methods are being applied to some of the most challenging social problems of our times: climate change, chronic...

Project: TEPSIE (ID: 290771)

Programme: Specific Programme "Cooperation": Socio-economic Sciences and Humanities

Last update: 2 December 2015

Add to my booklet

# <u>Final Report Summary - SISOB (An Observatorium for Science in Society based in Social Models)</u>

Executive Summary: The SiSOB (An Observatorium for Science in Society based on Social Models) project was a three-year EU project that was conducted from January 2011 to December 2013 (36 months). The project brought together seven universities and research centresfrom Europe...

Project: <u>SISOB</u> (ID: 266588)

Programme: Specific Programme "Capacities": Science in society

Last update: 20 January 2015

Add to my booklet

# <u>Final Report Summary - FESTOS (Foresight of Evolving Security Threats Posed by Emerging Technologies)</u>

Executive summary "FESTOS results are a very good contribution to policy and ethics discussions in the commission, FESTOS helps address challenges and threat of the future that need to be taken into account in Horizon 2020" (Ms Eva-Maria Engdahl EC DG enterprise and Industry...

Project: FESTOS (ID: 217993)

Programme: Specific Programme "Cooperation": Security

Last update: 29 March 2017

Add to my booklet

# <u>Periodic Reporting for period 1 - GuestXR (GuestXR: A Machine Learning Agent for Social</u> Harmony in eXtended Reality)

Immersive social spaces will soon become ubiquitous. However, there is also a warning to heed from social media. User content is the 'lifeblood of social media'. However, it often stimulates antisocial interaction and abuse, ultimately posing a danger to vulnerable people. In...

Project: <u>GuestXR</u> (ID: 101017884)

Programme: EXCELLENT SCIENCE - Future and Emerging Technologies (FET)

Last update: 4 July 2023 Add to my booklet

ID: 826506

From: 1 January 2019 to: 30 June 2022

"sustAGE aims to develop a person-centered solution for promoting the concept of ""sustainable work"" for EU industries. The project provides a paradigm shift in human machine interaction, building upon seven strategic technology trends, IoT, Machine learning, micro-moments...

Coordinated in: Greece

Programme: <u>SOCIETAL CHALLENGES - Health, demographic change and wellbeing, Active ageing, independent and assisted living, Individual awareness and</u>

empowerment for self-management of health

Last update: 28 December 2022

Add to my booklet

### ACES Autopoietic Cognitive Edge-cloud Services

ID: 101093126

From: 1 January 2023 to: 31 December 2025

The increasing need for cloud services at the edge (edge–services) is caused by the rapidly growing quantity and capabilities of connected and interacting edge devices exchanging vast amounts of data. This poses different challenges to cloud computing architectures at the...

Coordinated in: Portugal

Programme: Digital, Industry and Space, Advanced Computing and Big Data

Last update: 13 December 2022

Add to my booklet

# MIRROR Migration-Related Risks caused by misconceptions of Opportunities and Requirement

ID: 832921

From: 1 June 2019 to: 31 May 2022

The perception of Europe and individual European countries has a high impact on expectations and decisions of citizens from outside Europe (considering) coming to Europe, especially from countries of origin (COO) for migration. Misperceptions and targeted misinformation...

Coordinated in: Germany

Programme: Secure societies - Protecting freedom and security of Europe and its citizens, Strengthen security through border management, Support the Union's external security policies including through conflict prevention and peace-building

Last update: 10 March 2023

Add to my booklet

L2TOR Second Language Tutoring using Social Robots

ID: 688014

From: 1 January 2016 to: 31 December 2018

The L2TOR project capitalises on recent developments in human-robot interaction in which the use of social robots is explored in the context of teaching and tutoring. Social robots have been shown to have marked benefits over screen-based tutoring technologies, and have...

Coordinated in: United Kingdom

Programme: INDUSTRIAL LEADERSHIP - Leadership in enabling and industrial

technologies - Information and Communication Technologies (ICT)

Last update: 15 August 2022

Add to my booklet

PROJECT

# MICS Developing metrics and instruments to evaluate citizen science impacts on the environment and society

ID: 824711

From: 1 January 2019 to: 31 July 2022

THE MICS project brings together a transdisciplinary team to address a scientific and policy priority area where citizen science has the potential to promote a paradigm shift. Nature-based solutions (NBSs) are actions to protect, sustainably manage and restore natural or...

Coordinated in: United Kingdom

Programme: Integrate society in science and innovation issues, policies and activities in order to integrate citizens' interests and values and to increase the quality, relevance, social acceptability and sustainability of research and innovation outcomes in various fields of activity from social innovation to areas such as biotechnology and nanotechnology

Last update: 22 January 2023

Add to my booklet

# SPECIAL Scalable Policy-awarE linked data arChitecture for prIvacy, trAnsparency and compLiance

ID: 731601

From: 1 January 2017 to: 31 December 2019

The SPECIAL project will address the contradiction between Big Data innovation and privacy-aware data protection by proposing a technical solution that makes both of these goals realistic. We will develop technology that: (i) supports the acquisition of user consent at...

Coordinated in: France

Programme: INDUSTRIAL LEADERSHIP - Leadership in enabling and industrial

technologies - Information and Communication Technologies (ICT)

Last update: 18 August 2022

Add to my booklet

# <u>CAROLINE Collaborative Research Fellowships for a Responsive and Innovative Europe</u>

ID: 713279

From: 2 June 2016 to: 1 June 2022

The CAROLINE Fellowship Programme proposed by the Irish Research Council (IRC) will provide a unique opportunity for researchers to further develop their skills, competencies and experience through inter-sectoral collaboration with NGOs and International Organisations (IO)...

Coordinated in: Ireland

Programme: Increasing structural impact by co-funding activities, EXCELLENT SCIENCE -

Marie Skłodowska-Curie Actions Last update: 1 February 2024

Add to my booklet

### GATE BiG DAta for SmarT SociEty

ID: 857155

From: 1 September 2019 to: 31 August 2026

GATE aims to establish a "BiG DAta for SmarT SociEty" Center of Excellence in Bulgaria, in order to provide focus for increased scientific excellence and sustained Big Data growth, through attractive and stimulating research environment, advanced infrastructure supporting...

Coordinated in: Bulgaria

Programme: Teaming of excellent research institutions and low performing RDI regions

Last update: 25 May 2022

#### Add to my booklet

# <u>DRA The 'Vanishing Third Party': Access to Justice, Procedural Justice and Substantive Justice in the Age of Dispute Resolution Automation</u>

ID: 101044195

From: 1 March 2023 to: 29 February 2028

Courts without judges? Informal processes without mediators? We are on the verge of a dramatic paradigm shift in our justice system from human to algorithmic dispute resolution. While most of us perceive the delivery of justice as a human task, courts and informal

arenas...

Coordinated in: Israel

Programme: European Research Council (ERC)

Last update: 13 January 2023

Add to my booklet

### WEKIT Wearable Experience for Knowledge Intensive Training

ID: 687669

From: 1 December 2015 to: 28 February 2019

OBJECTIVES: Build on multi-discipline research (e.g., human-centred methodology integrates cognitive models, ergonomics, understanding of worker's well being) to accelerate how we identify, acquire and exploit skills valued by industry. Get high take-up by early adopters...

Coordinated in: Italy

Programme: INDUSTRIAL LEADERSHIP - Leadership in enabling and industrial

technologies - Information and Communication Technologies (ICT)

Last update: 16 August 2022

Add to my booklet

### Explanation in Online Help and Offline Training Based on Continuous Simulation

ID: BRPR950049

From: 1 January 1996 to: 31 December 1998

The main outcomes of the research activities of the EXTRAS project are the generic knowledge framework, and an extensive amount of the software produced which has allowed further steps in developing explanation systems. Explanation systems that are quite difficult, if not imp...

Coordinated in: United Kingdom

Programme: Specific research and technological development programme in the field of

industrial and materials technologies, 1994-1998

Last update: 21 October 1999

Add to my booklet

#### CAVAA Counterfactual Assessment and Valuation for Awareness Architecture

ID: 101071178

From: 1 October 2022 to: 30 September 2026

The Counterfactual Assessment and Valuation for Awareness Architecture (CAVAA) project proposes that awareness serves survival in a world governed by hidden states, to deal with the "invisible", from unexplored environments to social interaction that depends on the...

Coordinated in: Netherlands

Programme: The European Innovation Council (EIC)

Last update: 23 August 2022

### Add to my booklet

# FashionBrain Understanding Europe's Fashion Data Universe

ID: 732328

From: 1 January 2017 to: 31 December 2019

The primary goal of each retailer is to "understand your customers". Our interviews with retailers show a primary demand from the retail industry for predicting a customer's next demand. Surprisingly , even a complete record of past purchases (and returns) is not...

Coordinated in: United Kingdom

Programme: INDUSTRIAL LEADERSHIP - Leadership in enabling and industrial

technologies - Information and Communication Technologies (ICT)

Last update: 17 August 2022

Add to my booklet

AGERISK Neurocomputational mechanisms underlying age-related performance changes in goal-directed decisions from experience

ID: 708507

From: 1 September 2016 to: 2 March 2019

The ability to make goal-directed decisions concerning one's general well-being declines in later life. The primary—and potentially improvable—factor impacting this decline in decision-making performance is the learning process that precedes a decision. However, little...

Coordinated in: Germany

Programme: EXCELLENT SCIENCE - Marie Skłodowska-Curie Actions, Nurturing

excellence by means of cross-border and cross-sector mobility

Last update: 11 August 2022

Add to my booklet

### CLOTHILDE CLOTH manIpulation Learning from DEmonstrations

ID: 741930

From: 1 January 2018 to: 31 December 2023

Textile objects pervade human environments and their versatile manipulation by robots would open up a whole range of possibilities, from increasing the autonomy of elderly and disabled people, housekeeping and hospital logistics, to novelautomation in the clothing internet...

Coordinated in: Spain

Programme: EXCELLENT SCIENCE - European Research Council (ERC)

Last update: 8 December 2023

Add to my booklet

ROXANNE Real time network, text, and speaker analytics for combating organized crime

ID: 833635

From: 1 September 2019 to: 31 December 2022

Discovering criminal networks and identifying their members is one of the primary aspects of LEAs' mission. ROXANNE will contribute towards this goal by bridging the strengths of speech and language technologies (SLTs), visual analysis (VA) and network analysis (NA). If

Coordinated in: Switzerland

Programme: Secure societies - Protecting freedom and security of Europe and its citizens, Fight crime, illegal trafficking and terrorism, including understanding and tackling terrorist ideas and beliefs, Support the Union's external security policies including through conflict prevention and peace-building

Last update: 11 December 2023

Add to my booklet

# <u>E2-CREATE E2-CREATE:</u> Encoding Embodied CreativityVisual arts, performing arts, film, design

ID: 840465

From: 6 April 2020 to: 13 September 2022

Choreography is an art form well-known for combining rigorous physical and mental training with the highest degrees of creativity. However, as dance is the most ephemeral of art forms, this extraordinary embodied creativity has been in danger of disappearing without leaving a...

Coordinated in: United Kingdom

Programme: EXCELLENT SCIENCE - Marie Skłodowska-Curie Actions, Nurturing

excellence by means of cross-border and cross-sector mobility

Last update: 12 December 2023

Add to my booklet

# <u>iTalk2Learn Talk, Tutor, Explore, Learn: Intelligent Tutoring and Exploration for Robust Learning</u>

ID: 318051

From: 1 November 2012 to: 31 October 2015

In the aftermath of the PISA studies, which identified weaknesses of students in many European countries, especially in mathematics, the education of children in the elementary school grades has received a lot of attention. Yet, most learning systems that have been developed ...

Coordinated in: Germany

Programme: Specific Programme "Cooperation": Information and communication

technologies

Last update: 22 April 2017 Add to my booklet

# INNOVA MEASURE IV Econometric analyses and indicators on Research, Excellence and Impact of Research and Innovation

ID: 857088

From: 1 May 2019 to: 31 October 2020

The INNOVA MEASURE IV project continues the research activity carried out by the JRC in support of the work on better evidence for policy-making by the Directorate-General for Research & Innovation. It builds on the outcomes and capacities developed within the framework of the...

Coordinated in: Belgium

Programme: SOCIETAL CHALLENGES - Europe In A Changing World - Inclusive,

Innovative And Reflective Societies, Innovative societies

Last update: 18 August 2022

Add to my booklet

### ACANTO ACANTO: A CyberphysicAl social NeTwOrk using robot friends

ID: 643644

From: 1 February 2015 to: 31 July 2018

"Despite its recognised benefits, most older adults do not engage in a regular physical activity. The ACANTO project proposes a friendly robot walker (the FriWalk) that will abate a some of the most important barriers to this healthy behaviour. The FriWalk revisits the notion...

Coordinated in: Italy

Programme: SOCIETAL CHALLENGES - Health, demographic change and well-

being, Active ageing and self-management of health

Last update: 15 August 2022

Add to my booklet

GuestXR GuestXR: A Machine Learning Agent for Social Harmony in eXtended Reality

ID: 101017884

From: 1 January 2022 to: 31 December 2025

Immersive online social spaces will soon become ubiquitous. However, there is also a warning that we need to heed from social media. User content is the 'lifeblood of social media'. However, it often stimulates antisocial interaction and abuse, ultimately posing a danger...

Coordinated in: Spain

Programme: EXCELLENT SCIENCE - Future and Emerging Technologies (FET), FET

**Proactive** 

Last update: 13 June 2023 Add to my booklet

Corruption Roots At the roots of corruption: a behavioral ethics approach

ID: 637915

From: 1 September 2015 to: 31 August 2020

For many years, human cooperation has been praised as beneficial in organizational and personal settings. Indeed, cooperation allows people to develop trust, build meaningful relationships, achieve mutually beneficial outcomes, and strengthen bonding with one's group members...

Coordinated in: Netherlands

Programme: EXCELLENT SCIENCE - European Research Council (ERC)

Last update: 18 August 2022

Add to my booklet

CAPTAIN Coach Assistant via Projected and Tangible Interface

ID: 769830

From: 1 December 2017 to: 30 June 2021

Older adults typically prefer living at their homes as long as possible. However, they often need to be institutionalized due to the age related problems. Homecare can benefit today from a range of existing technologies including smartphones, sensors, etc., however, their...

Coordinated in: Greece

Programme: SOCIETAL CHALLENGES - Health, demographic change and well-

being, Active ageing and self-management of health

Last update: 13 June 2022 Add to my booklet

<u>EuPOLIS Integrated NBS-based Urban Planning Methodology for Enhancing the Health and Well-being of Citizens: the euPOLIS Approach</u>

ID: 869448

From: 1 September 2020 to: 31 August 2024

EuPOLIS aims to: (a) replace the traditional perception in which engineering systems are built to protect the environment at significant costs. We aim to deploy natural systems to simultaneously enhance Public Health (PH) and Well-Being (WB), and create resilient urban...

Coordinated in: Greece

Programme: SOCIETAL CHALLENGES - Climate action, Environment, Resource Efficiency and Raw Materials, Protection of the environment, sustainable management of

natural resources, water, biodiversity and ecosystems

Last update: 19 January 2024

Add to my booklet

FourCmodelling Conflict, Competition, Cooperation and Complexity: Using Evolutionary Game Theory to model realistic populations

ID: 690817

From: 1 January 2016 to: 31 December 2019

"Real animals and human populations are complex, involving structural relationships depending upon space and time and varied interactions between potentially many individuals. Human societies feature family units, communities, companies and nations. Some animal also have...

Coordinated in: United Kingdom

Programme: EXCELLENT SCIENCE - Marie Skłodowska-Curie Actions, Stimulating

innovation by means of cross-fertilisation of knowledge

Last update: 4 September 2023

Add to my booklet

EVICT The Impact of the International Right to Housing on National Legal Discourse: Using Data Science Techniques to Analyse Eviction Litigation

ID: 949316

From: 1 January 2021 to: 31 December 2025

Eviction – the involuntary loss of one's home – has a devastating impact on people's wellbeing and has severe consequences for society as a whole. During and after the financial crisis of 2007-2011, over 700,000 people in Europe either lost their homes or were at risk...

Coordinated in: Netherlands

Programme: EXCELLENT SCIENCE - European Research Council (ERC)

Last update: 10 June 2022

Add to my booklet

HECAT Disruptive Technologies Supporting Labour Market Decision Making

ID: 870702

From: 1 February 2020 to: 31 July 2023

Hecat aims to investigate, demonstrate and pilot a disruptive technology to support labour market decision making byunemployed citizens and those seeking to help them. At one stage or another, almost half of all EU citizens will rely on aPublic Employment Services (PES), and...

Coordinated in: Ireland

Programme: Explore new forms of innovation, with special emphasis on social innovation and creativity and understanding how all forms of innovation are developed, succeed or fail, SOCIETAL CHALLENGES - Europe In A Changing World - Inclusive, Innovative And

**Reflective Societies** 

Last update: 18 December 2023

Add to my booklet

Human Plus HUMAN+ Towards expertise in enhanced human/technology experience

ID: 945447

From: 1 July 2020 to: 30 June 2025

Rapid developments in information technology in the past three decades have opened up new, unfamiliar frontiers in all areas of society: culture and media, politics and security, health and wellbeing. Big data and machine learning are transforming our experience of social...

Coordinated in: Ireland

Programme: Increasing structural impact by co-funding activities, EXCELLENT SCIENCE -

Marie Skłodowska-Curie Actions Last update: 27 December 2023

Add to my booklet

### ARTSFORMATION Mobilising the Arts for an Inclusive Digital Transformation

ID: 870726

From: 1 April 2020 to: 30 September 2023

Thirty years ago, the internet, social media and smartphones had not been invented. Yet a generation later, almost every facet of our individual, public and -now- online life are dominated by the fast-pacing digital transformation. Last year we saw the privacy and data of...

Coordinated in: Norway

Programme: Explore new forms of innovation, with special emphasis on social innovation and creativity and understanding how all forms of innovation are developed, succeed or fail, SOCIETAL CHALLENGES - Europe In A Changing World - Inclusive, Innovative And Reflective Societies

Last update: 19 December 2023

Add to my booklet

# ROCK Regeneration and Optimisation of Cultural heritage in creative and Knowledge cities

ID: 730280

From: 1 May 2017 to: 31 December 2020

ROCK aims to develop an innovative, collaborative and circular systemic approach for regeneration and adaptive reuse of historic city centres. Implementing a repertoire of successful heritage-led regeneration initiatives, it will test the replicability of the spatial approach...

Coordinated in: Italy

Programme: Cultural heritage, SOCIETAL CHALLENGES - Climate action, Environment,

Resource Efficiency and Raw Materials

Last update: 13 September 2023

Add to my booklet

### iRead Infrastructure and integrated tools for personalized learning of reading skill

ID: 731724

From: 1 January 2017 to: 30 June 2021

The overarching aim of the iRead project is to develop a software infrastructure of personalised, adaptive technologies and a diverse set of applications for supporting learning and teaching of reading skills. The specific goals of the project proposed are to:1. Develop a...

Coordinated in: United Kingdom

Programme: INDUSTRIAL LEADERSHIP - Leadership in enabling and industrial

technologies - Information and Communication Technologies (ICT)

Last update: 10 June 2022

Add to my booklet

# COPA EUROPE COllaborative Platform for trAnsmedia storytelling and cross channel distribution of EUROPEan sport events

ID: 957059

From: 1 November 2020 to: 31 October 2023

COPA EUROPE aims to address the exploding demand for non-linear sports consumption (live and eSports) by leveraging OTT and combining it with new set of media technologies that will democratise the consumer experience, enable cost-sensitive live video from anywhere, and...

Coordinated in: Spain

Programme: INDUSTRIAL LEADERSHIP - Leadership in enabling and industrial

technologies - Information and Communication Technologies (ICT)

Last update: 27 December 2023

Add to my booklet

TECNIOspringINDUSTRY ACCIÓ programme to foster mobility of researchers with a focus in applied research and technology transfer

ID: 801342

From: 1 June 2019 to: 30 November 2024

TECNIOspring INDUSTRY Fellowship Programme is proposed by ACCIÓ, the Catalan Agency for Business and Competitiveness, attached to the Ministry of Business and Knowledge of the Government of Catalonia. With a budget of 11,085,120 € (46% EU contribution, 54% ACCIÓ own funds)...

Coordinated in: Spain

Programme: Increasing structural impact by co-funding activities, EXCELLENT SCIENCE -

Marie Skłodowska-Curie Actions Last update: 9 December 2022

Add to my booklet

### LEaDing Fellows LEaDing Fellows

ID: 707404

From: 2 January 2017 to: 1 May 2022

The LEaDing Fellow Programme offers 90 two-year postdoc positions to ambitious and excellent researchers who want to perform research in a challenging, internationally esteemed and multidisciplinary environment. The aim is to help them to develop new research skills and a view...

Coordinated in: Netherlands

Programme: Increasing structural impact by co-funding activities, EXCELLENT SCIENCE -

Marie Skłodowska-Curie Actions Last update: 24 January 2023

Add to my booklet

ID: 770299

From: 1 May 2018 to: 31 January 2022

### NewsEye NewsEye: A Digital Investigator for Historical Newspapers

ID: 770299

From: 1 May 2018 to: 31 January 2022

Newspapers collect information about cultural, political and social events in a more detailed way than any other public record. Since their beginnings in the 17th century they are recording billions of events, stories and names, in almost every language, every country and...

Coordinated in: France

Programme: Study European heritage, memory, identity, integration and cultural interaction and translation, including its representations in cultural and scientific collections, archives and museums, to better inform and understand the present by richer interpretations of the past, SOCIETAL CHALLENGES - Europe In A Changing World - Inclusive, Innovative And Reflective Societies

Last update: 8 December 2023

Add to my booklet

### WeVerify WIDER AND ENHANCED VERIFICATION FOR YOU

ID: 825297

From: 1 December 2018 to: 30 November 2021

Online disinformation and fake media content have emerged as a serious threat to democracy, economy and society. Content verification is currently far from trivial, even for experienced journalists, human rights activists or media literacy scholars. Moreover, recent advances...

Coordinated in: Bulgaria

Programme: INDUSTRIAL LEADERSHIP - Leadership in enabling and industrial

technologies - Information and Communication Technologies (ICT)

Last update: 4 September 2022

Add to my booklet

### **Sharing Cities Sharing Cities**

ID: 691895

From: 1 January 2016 to: 31 December 2021

Sharing Cities has four key objectives. 1) To achieve scale in the European smart cities market by proving that properly designed smart city solutions, based around common needs, can be integrated in complex urban environments. This will be done in a way that exhibits their...

Coordinated in: United Kingdom

Programme: SOCIETAL CHALLENGES - Secure, clean and efficient energy, Foster

**European Smart cities and Communities** 

Last update: 1 February 2024

Add to my booklet

popAI A European Positive Sum Approach towards AI tools in support of Law Enforcement and safeguarding privacy and fundamental rights

ID: 101022001

From: 1 October 2021 to: 30 September 2023

"popAI is a 24 month Coordination and Support Action bringing together security practitioners, AI scientists, ethics and privacy researchers, civil society organisations as well as social Sciences and humanities experts with the purpose of consolidating knowledge, exchanging...

Coordinated in: Greece

Programme: Ensure privacy and freedom, including in the Internet and enhance the societal, legal and ethical understanding of all areas of security, risk and management, Improve cyber security, Secure societies - Protecting freedom and security of Europe and its citizens, Fight crime, illegal trafficking and terrorism, including understanding and tackling terrorist ideas and beliefs

Last update: 29 December 2023

Add to my booklet

# <u>I-CONSENT Improving the guidelines for Informed Consent, including vulnerable</u> populations, under a gender perspective

ID: 741856

From: 1 May 2017 to: 31 March 2021

The informed consent (IC) process allows the subject to voluntarily decide whether or not his/her participation in research. Generally, ICs are difficult to read documents that do not include all stakeholders' perceptions. Therefore, informative IC should be a process that...

Coordinated in: Spain

Programme: Take due and proportional precautions in research and innovation activities by anticipating and assessing potential environmental, health and safety impacts, Develop the governance for the advancement of responsible research and innovation by all stakeholders, which is sensitive to society needs and demands and promote an ethics framework for research and innovation, Integrate society in science and innovation issues, policies and activities in order to integrate citizens' interests and values and to increase the quality, relevance, social acceptability and sustainability of research and innovation outcomes in various fields of activity from social innovation to areas such as biotechnology and nanotechnology, Promote gender equality in particular by supporting structural change in the organisation of research institutions and in the content and design of research activities

Last update: 1 September 2023

Add to my booklet

# ImAc Immersive Accessibility

ID: 761974

From: 1 October 2017 to: 31 March 2020

Advances in technology have led to the availability of consumer Head Mounted Displays and the availability of 360° cameras for capturing immersive content. This has enabled broadcasters to explore new experiences, where narrative and content can be delivered with a heightened...

Coordinated in: Spain

Programme: INDUSTRIAL LEADERSHIP - Leadership in enabling and industrial

technologies - Information and Communication Technologies (ICT)

Last update: 4 September 2022

Add to my booklet

TRACTION Opera co-creation for a social transformation

ID: 870610

From: 1 January 2020 to: 31 December 2022

Opera uses all the visual and performing arts to create extraordinary worlds of passion and sensibility. It is rightly recognised as a great achievement of European culture. And yet a form that once inspired social and artistic revolutions is often seen as the staid preserve...

Coordinated in: Spain

Programme: Study European heritage, memory, identity, integration and cultural interaction and translation, including its representations in cultural and scientific collections, archives and museums, to better inform and understand the present by richer interpretations of the past, SOCIETAL CHALLENGES - Europe In A Changing World - Inclusive, Innovative And Reflective Societies, Research into European countries' and regions' history, literature, art, philosophy and religions and how these have informed contemporary European diversity

Last update: 8 December 2023

Add to my booklet

#### Awareness Inside

Awareness and consciousness have been high on the Artificial Intelligence (AI) research agenda for decades. Progress has been difficult because it has been hard to agree on exactly what it means to be aware. Most researches would agree though that we do not have any truly...

Available languages:

EN

Last update: 20 June 2022

Add to my booklet

IC-3i-PhD Institut Curie 3-i PhD Program

ID: 666003

From: 1 September 2016 to: 31 August 2022

The new IC-3i-PhD program of Institut Curie and its partners will produce top-level scientific knowledge by promoting basic interdisciplinary research that will be translated into novel therapeutic avenues for diagnosis and treatment. The completely re-structured, revitalized...

Coordinated in: France

Programme: Increasing structural impact by co-funding activities, EXCELLENT SCIENCE -

Marie Skłodowska-Curie Actions Last update: 29 April 2023

Add to my booklet

PROJECT

COMPROP Computational Propaganda: Investigating the Impact of Algorithms and Bots on Political Discourse in Europe

ID: 648311

From: 1 January 2016 to: 31 December 2020

Social media can have an impressive impact on civic engagement and political discourse. Yet increasingly we find political actors using digital media and automated scripts for social control. Computational propaganda—through bots, botnets, and algorithms—has become one of...

Coordinated in: United Kingdom

Programme: EXCELLENT SCIENCE - European Research Council (ERC)

Last update: 24 August 2022

Add to my booklet

FEDORA Future-oriented Science EDucation to enhance Responsibility and engagement in the society of Acceleration and uncertainty

ID: 872841

From: 1 September 2020 to: 31 August 2023

The relation between science and society is strongly influenced by the impressive acceleration of scientific and technological development. Within this society of acceleration (H. Rosa), the young are experiencing a sense of derangement and an alarming sense of loss of future...

### Working Age Smart Working environments for all Ages

ID: 826232

From: 1 February 2019 to: 31 July 2022

WorkingAge will use innovative HCI methods (augmented reality, virtual reality, gesture/voice recognition and eye tracking) to measure the user emotional/cognitive/health state and create communication paths. At the same time with the use of IoT sensors will be able to detect...

Coordinated in: Spain

Programme: <u>SOCIETAL CHALLENGES - Health, demographic change and wellbeing, Active ageing, independent and assisted living, Individual awareness and</u>

empowerment for self-management of health

Last update: 28 December 2022

Add to my booklet

#### PROJECT

# ENLIGHT RISE RESEARCH AND INNOVATION AGENDA WITH AND FOR SOCIETY: Leveraging digital innovation for a greener and healthier Europe

ID: 101035819

From: 1 September 2021 to: 31 August 2024

ENLIGHT is a European university Network to promote equitable quality of Life, sustainability and global engagement through Higher education Transformation. It brings together 9 comprehensive, research-intensive, new flagship universities with a strong reputation. ENLIGHT...

Coordinated in: France

Programme: SCIENCE WITH AND FOR SOCIETY

Last update: 5 February 2024

Add to my booklet

#### PROJECT

# INVICTUS Innovative Volumetric Capture and Editing Tools for Ubiquitous Storytelling

ID: 952147

From: 1 October 2020 to: 31 December 2022

The INVICTUS project aims at delivering innovative authoring tools for the creation of a new generation of high-fidelity avatars (numerical representations of real humans) and the integration of these avatars in interactive and non-interactive narratives (movies, games, AR+VR...

Coordinated in: France

Programme: INDUSTRIAL LEADERSHIP - Leadership in enabling and industrial

technologies - Information and Communication Technologies (ICT)

Last update: 27 December 2023

Add to my booklet

### INBOTS Inclusive Robotics for a better Society (INBOTS)

ID: 780073

From: 1 January 2018 to: 30 June 2021

The main challenge that INBOTS wants to overcomes is the lack of a clear understanding and communication between all the involved stakeholders. These limitations hinder current efforts to successfully discuss and agree on the many important technical and non-technical aspects...

Coordinated in: Spain

Programme: INDUSTRIAL LEADERSHIP - Leadership in enabling and industrial

technologies - Information and Communication Technologies (ICT)

Last update: 25 July 2022 Add to my booklet

### CURE Copernicus for Urban Resilience in Europe

ID: 870337

From: 1 January 2020 to: 30 April 2023

Resilience has become an important necessity for cities, particularly in the face of climate change. Mitigation and adaptation actions that enhance the resilience of cities need to be based on a sound understanding and quantification of the drivers of urban transformation and...

Coordinated in: Greece

Programme: INDUSTRIAL LEADERSHIP - Leadership in enabling and industrial

<u>technologies – Space, Enabling exploitation of space data</u>

Last update: 18 December 2023

Add to my booklet

# <u>iTRACK Integrated system for real-time TRACKing and collective intelligence in civilian</u> humanitarian missions

ID: 700510

From: 1 May 2016 to: 30 April 2019

The enduring humanitarian crisis in the Middle East, the unrelenting high levels of violence in Afghanistan and new outbursts of violence in South-Sudan have made 2014 another recordbreaking year for acts of violence against humanitarian aid workers. In 2000 41 significant...

Coordinated in: Norway

Programme: Secure societies - Protecting freedom and security of Europe and its citizens

Last update: 16 August 2022

Add to my booklet

ARCHITECHTURES Empowering building design professionals through Artificial Intelligence on the cloud

ID: 854888

From: 1 March 2019 to: 31 July 2019

In the next 35 years urban population will double producing a huge growing demand for housing. As population grows, concerns related to efficient management of natural resources is also increasing. The pressure is on for developers and design teams to find ways of designing...

Coordinated in: Spain

Programme: PRIORITY 'Societal challenges, INDUSTRIAL LEADERSHIP - Innovation In SMEs, INDUSTRIAL LEADERSHIP - Leadership in enabling and industrial technologies

Last update: 15 August 2022

Add to my booklet

### ARETE AUGMENTED REALITY INTERACTIVE EDUCATIONAL SYSTEM

ID: 856533

From: 1 November 2019 to: 30 April 2023

Augmented Reality (AR) refers to the real-time digital overlay of information over physical elements. ARETE aims to develop, integrate and disseminate interactive technology via AR methods and tools for the creation and inter-connection of existing digital systems and to build...

Coordinated in: Ireland

Programme: INDUSTRIAL LEADERSHIP - Leadership in enabling and industrial

technologies - Information and Communication Technologies (ICT)

Last update: 29 January 2024

Add to my booklet

CARESSES Culture Aware Robots and Environmental Sensor Systems for Elderly Support

ID: 737858

From: 1 January 2017 to: 31 January 2020

The groundbreaking objective of CARESSES is to build culturally competent care robots, able to autonomously re-configure their way of acting and speaking, when offering a service, to match the culture, customs and etiquette of the person they are assisting. By designing robots...

Coordinated in: Italy

Programme: SOCIETAL CHALLENGES - Health, demographic change and well-

being, Active ageing and self-management of health

Last update: 13 September 2023

Add to my booklet

### IBSEN Bridging the gap: from Individual Behaviour to the Socio-tEchnical MaN

ID: 662725

From: 1 September 2015 to: 31 August 2018

Developing models of real-world societal scenarios and systems is a key topic in the research agenda of social sciences, but is hindered by the lack of controlled experimentation with large groups of people. IBSEN will provide a breakthrough by building a repertoire of human...

Coordinated in: Spain

Programme: EXCELLENT SCIENCE - Future and Emerging Technologies (FET), FET Open

Last update: 20 July 2023 Add to my booklet

### MAHALO Modern ATM via Human/Automation Learning Optimisation

ID: 892970

From: 1 June 2020 to: 30 November 2022

MAHALO asks a simple but profound question: in the emerging age of Machine Learning (ML), should we be developing automation that matches human behavior (i.e., conformal), or automation that is understandable to the human (i.e., transparent)? Further, what tradeoffs exist, in...

Coordinated in: Italy

Programme: SOCIETAL CHALLENGES - Smart, Green And Integrated Transport, SESAR

<u>JU</u>

Last update: 13 June 2023 Add to my booklet

# <u>TELAIGEN The Spanish Telecommunication Sector and the Development of AI Products</u> from a Gender Perspective

ID: 101028792

From: 1 February 2022 to: 31 January 2024

The rise of algorithm-powered technology in the telecommunications industry has been criticised for reproducing gender bias, particularly in Artificial Intelligence-driven (AI) products. This interdisciplinary and intersectoral project explores the gender bias within the...

Coordinated in: Spain

Programme: EXCELLENT SCIENCE - Marie Skłodowska-Curie Actions, Nurturing

excellence by means of cross-border and cross-sector mobility

Last update: 28 December 2023

Add to my booklet

### REELER Responsible Ethical Learning with Robotics

ID: 731726

From: 1 January 2017 to: 31 December 2019

REELER - Responsible Ethical Learning with RoboticsRobots are the next ICT-related technology on the horizon ready to radically alter human societies. It is a major societal concern that up to 40% jobs may be replaced by robots over the next 20 years. Few empirical studies...

Coordinated in: Denmark

Programme: INDUSTRIAL LEADERSHIP - Leadership in enabling and industrial

technologies - Information and Communication Technologies (ICT)

Last update: 17 August 2022

Add to my booklet

# VICINITY Open virtual neighbourhood network to connect intelligent buildings and smart objects

ID: 688467

From: 1 January 2016 to: 31 December 2019

The lack of interoperability is considered as the most important barrier to achieve the global integration of IoT ecosystems across borders of different disciplines, vendors and standards. Indeed, the current IoT landscape consists of a large set of isolated islands that do...

Coordinated in: Germany

Programme: INDUSTRIAL LEADERSHIP - Leadership in enabling and industrial

technologies - Information and Communication Technologies (ICT)

Last update: 5 April 2023 Add to my booklet

### AWARE Coordination Action for Self-Awareness \nin Autonomic Systems

ID: 257154

From: 1 October 2010 to: 30 September 2013

The main aim of the AWARE Coordination Action is to provide a focal point for the wide range of research domains potentially addressed by the FET Proactive Initiative in AWARENESS. Self-awareness in autonomic systems can include ideas and concepts from artificial intelligence...

Coordinated in: United Kingdom

Programme: Specific Programme "Cooperation": Information and communication

technologies

Last update: 15 July 2019 Add to my booklet

### City4Age Elderly-friendly City services for active and healthy ageing

ID: 689731

From: 1 December 2015 to: 30 November 2018

The first and core objective of City4Age is to enable Ambient Assisted Cities or Age-friendly Cities, where the urban communities of elderly people living in Smart Cities are provided with a range of ICT tools and services that - in a completely unobtrusive manner - will...

Coordinated in: Italy

Programme: SOCIETAL CHALLENGES - Health, demographic change and well-

being, Active ageing and self-management of health

Last update: 15 August 2022

Add to my booklet

RePAIR Reconstructing the Past: Artificial Intelligence and Robotics Meet Cultural Heritage

ID: 964854

From: 1 September 2021 to: 28 February 2025

Our goal with this project is to develop a ground-breaking technology to virtually eliminate one of the most labour-intensive and frustrating steps in archaeological research, namely the physical reconstruction of shattered artworks. Indeed, countless vases, amphoras, frescos...

Coordinated in: Italy

Programme: EXCELLENT SCIENCE - Future and Emerging Technologies (FET), FET Open

Last update: 29 January 2024

Add to my booklet

NANOINFER Intelligent Memories that Perform Inference with the Physics of Nanodevices EASYTV Easing the access of Europeans with disabilities to converging media and content

ID: 761999

From: 1 October 2017 to: 30 June 2020

One of the many challenges people with various degrees of disabilities face (visually or hearing impaired) is their inability and difficulty to access mainstream products and services thus being excluded from enjoying audio-visual services on an equal basis as people without...

Coordinated in: Spain

Programme: INDUSTRIAL LEADERSHIP - Leadership in enabling and industrial

technologies - Information and Communication Technologies (ICT)

Last update: 4 September 2022

Add to my booklet

#### ReaLsMs Real Smart Cities

ID: 777707

From: 1 December 2017 to: 31 May 2022

The overarching objective of the ReaLsMs is to develop and implement a perspective on the Smart City through critical humanities research and innovation in the context of the Digital Studies. The joint research fields of ReaLsMs will be the development of historical and...

Coordinated in: Ireland

Programme: EXCELLENT SCIENCE - Marie Skłodowska-Curie Actions, Stimulating innovation by means of cross-fertilisation of knowledge

Last update: 8 December 2023

Add to my booklet

VRTogether An end-to-end system for the production and delivery of photorealistic social immersive virtual reality experiences

ID: 762111

From: 1 October 2017 to: 31 December 2020

VR-Together will offer new ground-breaking virtual reality experiences based on social photorealistic immersive content. For this purpose, it will develop and assemble an end-to-end pipeline integrating state-of-the-art technologies and off-the-shelf components. The challenge...

Coordinated in: Spain

Programme: INDUSTRIAL LEADERSHIP - Leadership in enabling and industrial

technologies - Information and Communication Technologies (ICT)

Last update: 11 August 2021

Add to my booklet

### ELG European Language Grid

ID: 825627

From: 1 January 2019 to: 30 June 2022

With 24 official EU and many more additional languages, multilingualism in Europe and an inclusive Digital Single Market can only be enabled through Language Technologies (LTs). European LT business is dominated by thousands of SMEs and a few large players. Many

are...

Coordinated in: Germany

Programme: INDUSTRIAL LEADERSHIP - Leadership in enabling and industrial

technologies - Information and Communication Technologies (ICT)

Last update: 28 December 2022

Add to my booklet

# IMPACT Impact of Cultural aspects in the management of emergencies in public Transport

ID: 653383

From: 1 May 2015 to: 31 October 2017

The objective of the IMPACT project is to investigate the essential role played by cultural factors in managing safety- and security-issues related to emergencies in public transport systems. The IMPACT Coordination and Supporting Action is aimed at analysing the different...

Coordinated in: Italy

Programme: Secure societies - Protecting freedom and security of Europe and its citizens

Last update: 24 May 2023

Add to my booklet

# SIRCIW Strengthening International Research Capacity in Wales

ID: 663830

From: 1 September 2015 to: 28 February 2022

Scientists in Wales are efficient, productive, collaborative, impactful and in many cases world leading. Recent evidence shows scientific excellence but a lack of critical mass in areas most likely to drive a knowledge economy through innovation and translation. This...

Coordinated in: United Kingdom

Programme: Increasing structural impact by co-funding activities, EXCELLENT SCIENCE -

Marie Skłodowska-Curie Actions Last update: 3 October 2023

Add to my booklet

### Hungry EcoCities AI enabled artistic solutions for sustainable food systems

ID: 101069990

From: 1 September 2022 to: 28 February 2026

Agriculture has been a nursery for practical solutions to global challenges for a long time. EU agriculture is the only major system in the world that reduced greenhouse gas (CHC) emissions by 20% since 1990. Nonetheless, even though the EU's transition to sustainable food...

Coordinated in: Czechia

Programme: Digital, Industry and Space, Artificial Intelligence and Robotics

Last update: 18 August 2022

Add to my booklet

DROIECT

### **EOSC-Nordic EOSC-Nordic**

ID: 857652

From: 1 September 2019 to: 30 November 2022

EOSC-Nordic aims to facilitate the coordination of EOSC relevant initiatives within the Nordic and Baltic countries and exploit synergies to achieve greater harmonisation at policy and service provisioning across these countries, in compliance with EOSC agreed standards and...

Coordinated in: Norway

Programme: Developing new world-class research infrastructures, EXCELLENT SCIENCE -

**Research Infrastructures** 

Last update: 12 December 2023

Add to my booklet

### EASYRIGHTS Enabling immigrants to easily know and exercise their rights

ID: 870980

From: 1 January 2020 to: 30 November 2022

The overarching objective of EASYRIGHTS is to develop a co-creation eco-system in which different actors belonging to the local governance system can cooperate in increasing the quantity and quality of public (welfare) services available to immigrants. The specific aims are to...

Coordinated in: Italy

Programme: The mechanisms to promote smart, sustainable and inclusive

growth, SOCIETAL CHALLENGES - Europe In A Changing World - Inclusive, Innovative And Reflective Societies, Trusted organisations, practices, services and policies that are necessary to build resilient, inclusive, participatory, open and creative societies in Europe, in particular taking into account migration, integration and demographic change

Last update: 1 February 2024

Add to my booklet

# EDITO DIGITAL HANDLING AND DISTRIBUTION OF PERSONALIZED PRESS CLIPPINGS

ID: LE12246

From: 1 November 1995 to: 31 October 1997

EDITO is developing an application for press editors to deliver advanced on-line news services. The system is intended to retrieve press cuttings from a large newspaper database, filtered according to the subscriber-specified subject. It has tools for viewing, marking up and

Coordinated in: France

Programme: Specific programme of research and technological development and demonstration in the area of telematic applications of common interest, 1994-1998

Last update: 1 November 1996

Add to my booklet