#### **ANNEX IV**

# SUCCESSFUL AI-ENABLED PROJECTS ON 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 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

#### 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: <u>INDUSTRIAL LEADERSHIP</u> <u>Leadership in enabling and industrial</u> 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: AIDA (ID: 776262)
- Programme: <u>INDUSTRIAL LEADERSHIP</u> <u>Leadership in enabling and industrial technologies</u> <u>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

Periodic Reporting for period 2 - NeCOL (NeCOL: An Innovative Methodology for Building Better Deep Learning Tools for Real Word Applications)

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: CALLISTO (ID: 101004152)

Programme: INDUSTRIAL LEADERSHIP - Leadership in enabling and industrial

technologies - Space Last update: 9 May 2022 Add to my booklet

## Periodic Reporting for period 1 - NL4XAI (Interactive Natural Language Technology for Explainable Artificial Intelligence)

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 nonexpert 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...

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</u> for Europe)

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

FN

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: IT Solutions for attractive railway</u> <u>services, SOCIETAL CHALLENGES - Smart, 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

# <u>UNICORE A Common Code Base and Toolkit for Deployment of Applications to Secure and Reliable Virtual Execution Environments</u>

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

# Multi-Moby Safe, Secure, High Performing Multi-Passanger and Multi-Commercial Uses Affordable EVs

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

# 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

# <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

#### PROJECT 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

nencon and social

# <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

# <u>Final Report Summary - CRISIS (CRitical Incident management training System using an</u> 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: EXCELLENT SCIENCE - Marie Skłodowska-Curie Actions, Stimulating

innovation by means of cross-fertilisation of knowledge

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</u> Secure technologies, solutions and business models

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...

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, suppporting 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: <u>EXCELLENT SCIENCE - Marie Skłodowska-Curie Actions</u>, <u>Nurturing</u> 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

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

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: <u>INDUSTRIAL LEADERSHIP - Leadership in enabling and industrial</u> <u>technologies - Information and Communication Technologies (ICT)</u>, <u>Advanced interfaces and</u> 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

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# 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

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PROJECT

## <u>Intranetum Disrupting the Way We Store and Search for Files, Replacing The Folder-Based</u> 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

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...

willeii...

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

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