ITEA Award of Excellence winners with Portuguese participation

Status March 2024

ITEA 4

ITEA is the Eureka Cluster on software innovation


SPEEDOMETER v0.1
BOOST
min
max
k-W
Nm
km/h
193
DASHBOARD
Model
Climate-contrpl
INTERIOR
OUTDOOR
Run of Kilometers
Tire Pressure
GLOBAL
FRONT LEFT
FRONT RIGHT
BACK LEFT
BACK RIGHT
PSI
40
41
31
39
Standar-
disation
PANORAMA

PANORAMA

Supporting the shift to open source

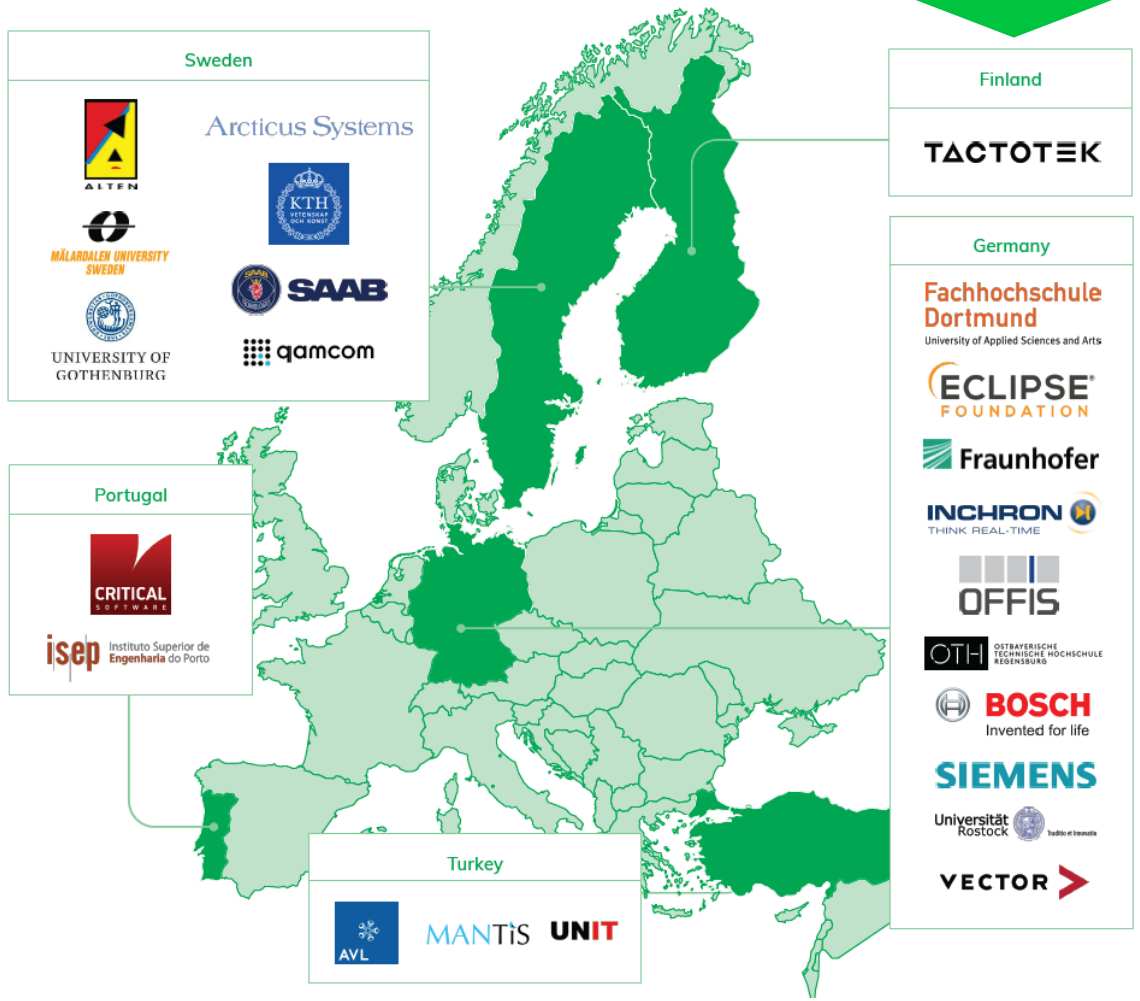
Winner ITEA Award of Excellence ‘Standardisation’ 2022

In the automotive domain, many similar control units are used, but different organisations often use heterogeneous functional domains, hardware and teams. This complicates collaboration, while this is very important as many stakeholders are involved.

PANORAMA has created an open-source meta-model and framework that promotes collaboration on software and hardware development using heterogenous tools and practices and without losing control of one’s own data.

Start date – End date
Apr 2019 - Sep 2022

Website
https://itea4.org/project/panorama.html
https://www.panorama-research.org/



PANORAMA
Examples of impact highlights

- The project focused on open-source collaboration in a business-friendly ecosystem. This approach has resulted in the emergence of a global community: partners in Europe, Asia, Africa and the Americas are already making use of PANORAMA, including the huge automotive and avionics markets of Germany, China and the USA.

- Clear benefits can be seen in maintainability (time reduction from 57 to 12 days), reliability (A grade for code quality from the industry standard SonarQube) and efficiency (reduction of local set-up of the installation and integration of several tools from eight hours to 0.8 hours).


Business
impact
CyberFactory#1

CyberFactory#1

Fostering the optimisation and resilience of the Factory of the Future

To enable the Factory of the Future, optimisation must be reconciled with security. The growing integration of Information Technology into Operational Technology exposes manufacturing systems to a growing number and diversity of threats. The ITEA project CyberFactory#1 has designed, developed, integrated and demonstrated a set of key enabling capabilities to foster the optimisation and resilience of the Factory of the Future.

Start date – End date
Dec 2018 – June 2022

Website
https://itea4.org/project/cyberfactory-1.html

CyberFactory#1

Examples of impact highlights

- Airbus in France is collaborating with Bittium in Finland to deploy CyberRange to simulate and monitor their distributed manufacturing environment. Airbus is also offering Security Operation Centre (SOC) services that monitor a factory's traffic, raise alarms and respond to anomalies. Across the project, commercialisation will target the digital twin, Industry 4.0 and IIoT security markets, with impressive results expected in each: by 2025, partners can expect revenues of EUR 8 million and 82 new jobs in the digital twin domain, EUR 28 million and 114 jobs in Industry 4.0 and EUR 114 million and 256 jobs in IIoT security. This total impact equals EUR 150 million and 452 jobs across the consortium.
- RoboShave has achieved 100% traceability of processes and products from the shop floor and 100% accuracy of (near) real-time information on dashboards, both of which started at zero. By automating machine and manufacturing execution system communication, it has also seen a 100% reduction in the time spent by human operators on manual machine data collection. In turn, this reduces human error while improving worker satisfaction by allowing them to focus on more stimulating tasks.
- The project has been recognised as a pioneer of Industry 5.0, which goes beyond efficiency and productivity and reinforces industry's contribution to societal goals. With its focus on a sustainable, human-centric and resilient industry, CyberFactory#1 has paved the way to the next industrial revolution.


kW
Data Analysis
Green Energy
225
kW
Data Analysis
Innovation
Water Consumption
5310
lt
Data Analysis
Data Analysis
8000
2000
0
kW/h
Jan
Feb
Mar
Apr
May
FUSE-IT

FUSE-IT

Enhanced connectivity & security for building management at lower costs

FUSE-IT addressed the need for sustainable, reliable, user-friendly, efficient, safe and secure Building Management Systems in the context of smart critical sites, like hospitals. From a site management perspective, it solves the dilemma of efficiency and security in intelligent buildings. At the user level, a smart unified building management interface enables the daily monitoring and control of a building, while a full security management interface enables the supervision of both physical and logical security throughout the premises. And at the end-user level, this can save both energy and lives.

Start date – End date
April 2018 – March 2021

Website
https://itea4.org/project/bimy.html

FUSE-IT
Examples of impact highlights

- A new (and misunderstood) topic when the project idea was first introduced back in 2013 was the protection of smart infrastructures against combined cyber and physical threats. This now appears in the top three areas of investment by public and private actors. From this perspective, FUSE-IT has been a pioneer project, enabling the consortium members to take a strategic lead.
- Since 2017, about €48 million in revenue has been reported in direct relation to the project results. The most striking commercial successes include:
- 17 system integration operation contracts in the field of smart building management and optimisation.
- 25 contracts won in the field of critical infrastructure protection against cyber and physical threats.
- the successful market introduction of a start-up company delivering SaaS platform services for enhanced control and management of sensitive building information.
- The project has led to the acceptance of four patents.
- Airbus CyberSecurity has been awarded a €740,000 contract to fulfil risk assessment surveys on 14 sites of Airbus Defence and Space in Spain, France, the UK and Germany and a contract worth €500,000 to secure a data centre organisation against cyber and physical threats. In addition, Airbus CyberSecurity has been awarded a multimillion-euro contract with an important gas transportation company, an integration contract for the protection of a large data centre's infrastructure and several contracts with large energy production utilities and distribution system operators in the UK, France and Germany.
- The FUSE-IT project allowed Niko to grow faster and to become more attractive to other companies. The team is still growing and has had double-digit growth during the last five years.