

The Software Engineering and Internet Technologies (SEIT) Laboratory focuses its research activities on two important areas of Information Technology, namely Software Engineering and Internet Technologies. In the first area, SEIT focuses on Cloud Computing, Service Oriented Architectures, Context-Aware Middleware Platforms and Smart and Mobile Computing for the development of pervasive, self-adaptive applications and Smart IoT services. In the second area, the Laboratory concentrates on the development of ICT-enabled Environments, platforms and tools for implementing Health monitoring and support services, Smart and Personalised services for Elders, Assistive Technologies for people with disabilities and Creativity services. The lab also pursues activities related to Technology Enhanced Learning, E-Business, E-Government and developing environments for elders' social inclusion, active ageing and independent living. Finally, the lab's research is also related to Creativity, Recommender Systems and Crowd Sourcing.

SEIT is actively involved in the H2020, 5th, 6th and 7th Framework, where it participated in multiple EU funded projects and attracted more than €5M in funding. The Laboratory has also been involved in national projects and other EU funded initiatives, notably AAL (Ambient Assisted Living), Erasmus+, INTERREG IVC, ESIS (European Survey in Information Society), but also the Leonardo Da Vinci framework on Vocational Training. The Laboratory currently occupies 9 personnel, including 4 post-doctoral scientists and 5 postgraduate ones. The Laboratory has access to extensive hardware and software facilities that include cloud, middleware and GRID platforms, multimedia and teleconferencing environments.

Participation in EU Funding Initiatives

The Laboratory is strongly interested in participating in proposals in the following topics of the H2020 Work Programme 2018-2020.

ICT-55-2020: Interactive Technologies

ICT-44-2020: Next Generation Media

ICT-50-2020: Software Technologies

ICT-51-2020: Big Data technologies and extreme-scale analytics

ICT-56-2020: Next Generation Internet of Things

ICT-40-2020: Cloud Computing: towards a smart cloud computing continuum

ICT-57-2020: An empowering, inclusive Next Generation Internet

DT-ICT-09-2020: Boost rural economies through cross-sector digital service platforms

SU-ICT-02-2020: Building blocks for resilience in evolving ICT systems

SC1-DTH-13-2020: Implementation research for scaling up and transfer of innovative solutions involving digital tools for people-centred care

SC1-DTH-02-2020: Personalised early risk prediction, prevention and intervention based on Artificial Intelligence and Big Data technologies

SC1-DTH-04-2020: International cooperation in smart living environments for ageing people

LC-MG-1-12-2020: Cities as climate-resilient, connected multimodal nodes for smart and clean mobility: new approaches towards demonstrating and testing innovative solutions

PROJECTS IN WHICH SEIT HAS BEEN RECENTLY INVOLVED



SCICHALLENGE HORIZON 2020

The SCICHALLENGE project focuses on developing novel concepts to actively integrate young people in science education using a context-based approach to self-produced digital education materials from young people for young people.

PAASAGE

PaaSage EU FP7 project aims at creating a platform and a methodology for helping software engineers creating new applications and migrating old applications that can run on multiple Cloud platforms.

INNOFUN

Innofun's aims at a methodology and digital tool, whose task is to improve regional policies concerning innovation funding, to achieve the goal of making the selection criteria flexible and reducing the communication gap between innovation and finance/market/people.



PROSPERITY4ALL

Prosperity4all EU FP7 focuses on developing the infrastructure to allow a new ecosystem to grow and create a robust cross-platform spectrum of mainstream and assistive technology based access solutions required.

ReaDI-STANCE (RESTART 2016 – 2020 PROGRAMME) READING DIFFICULTIES INTERVENTION: SCIENTIFIC, TECHNOLOGICAL, AND NEW COMMUNITY EFFORTS:

the project aims to create a novel ICT framework, web platform and tools to facilitate children with reading difficulties by analysing remediation data micro-genetically.

EASIER Erasmus+ (Knowledge Alliance):

EASIER proposes an innovative solution in the area of surgical and interventional education, and is specific for teaching and learning technical and nontechnical skills based on TEL.





JUST/2016/ACTION GRANT: SEIT Lab participates in this project as an ICT expert partner aiming to develop an interactive practical-oriented e-Learning programme targeting judiciary, legal practitioners and court staff as a training tool for distance self-learning and as an advanced training means.



DiFens Erasmus+ (SEIT Lab Coordinator): The DiFens project concept is to elaborate such comprehensive, accessible and feasible outputs, which will navigate young people - potential young entrepreneurs and young entrepreneurs - in the process of utilizing ICT technologies in their business.



VALS will define sustainable processes to build knowledge partnerships between Higher Education (HE) and companies to collaborate on resolving real business problems through open innovation mediated by the use of Open Source Software (OSS).



V-ALERT aims at providing enterprises employees and ICT users with an immersive, cost-effective and innovative virtual learning environment that will fully support life-long learning in Information Security principles.



AsTeRICS (<http://www.asterics.eu>) will provide a flexible and affordable construction set for realizing user driven AT by combining emerging sensor techniques like BCI and computer vision with basic actuators.



The Connected Vitality Personal Telepresence Network (CVN) (www.connectedvitality.eu) aims to provide a video based communications network to link groups of senior citizens through activities of shared interest.



The COIN IP (<http://www.coin-ip.eu>) aims to research, develop and prototype an open service platform comprised of enterprise COllaboration and enterprise INteroperability services.



idSpace (www.idspace-project.org) will be a responsive web-based environment which will offer an integrated suite of knowledge eliciting and sharing tools, and create a collective, sharable memory of the entire design process.



MUSIC (www.ist-music.eu), develops open-source software to facilitate self-adapting applications in highly dynamic user and execution contexts.



MADAM (www.ist-madam.org), a software engineering project on the development of a middleware platform for mobile adaptable applications.



UNITE (www.unite-ist.org) aims at developing a pedagogical framework which exploits the potential of new technologies to foster enquiry/discovery learning, and support collaborative and autonomous learning environments.



B3Regions (www.b3regions.eu) innovative project aims to tackle the difficulties of implementing broadband connections in remote or disadvantaged areas.



BETSY (www.betsy-project.org), an embedded systems project on delivering video streams to handheld devices.



MEDFORIST (www.medforist.org), an Ecommerce project on the development of related training material for professionals along with an associated e-Learning platform.



HealthService24 – Continuous Mobile Services for Healthcare aims at realizing the mobile health dream by an integrated mobile health service supporting patients and health care professionals' mobility



MEDICATE (www.medicare-online.org), a telemedicine project on the development of a monitoring platform for home patients.



CBSENET (www.cbse.net), a network of organizations promoting component-based technologies.



MVU (www.med-vu.org), an Open and Distance Learning project on the development of an e-course on Information Technology.

