

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.

**ICT-15-2019-2020:** Cloud Computing

**ICT-16-2018:** Software Technologies

**ICT-24-2018-2019:** Next Generation Internet - An Open Internet Initiative

**ICT-25-2018-2020:** Interactive Technologies

**ICT-27-2018-2020:** Internet of Things

**ICT-28-2018:** Future Hyper-connected Sociality

**ICT-29-2018:** Multilingual Next Generation Internet

**ICT-30-2019-2020:** An empowering, inclusive Next Generation Internet

**ICT-33-2019:** Startup Europe for Growth and Innovation Radar

**DT-ICT-01-2019:** Smart Anything Everywhere

**DT-ICT-10-2018-19:** Interoperable and smart homes and grids

**DT-ICT-09-2020:** Digital service platforms for rural economies

**DT-ICT-13-2019:** Digital Platforms/Pilots Horizontal Activities

**SC1-DTH-03-2018:** Adaptive smart working and living environments supporting active and healthy ageing

**SC1-DTH-05-2019:** Large scale implementation of digital innovation for health and care in an ageing society

**SC1-DTH-10-2019-2020:** Digital health and care

## 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.

### VELOCITY ERASMUS+

VeLoCiTy Erasmus+ (SEIT Lab Co-ordinator): The project deals with the problem of finding a job in another country which is derived from culture and ethnic differences. The main goal is to eliminate any barriers, providing equal opportunities to remotely attend a series of consulting courses through an innovative platform.

### WORLD-OF-PHYSICS ERASMUS+

World-of-Physics Erasmus+ (SEIT Lab Coordinator): The World-of-Physics Erasmus+ project aims to assist students in studying the physics domain with the utilization of innovative technologies like virtual reality.



### INFORM

**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.

**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).

**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 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.

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

**UNITE** ([www.unite-ist.org](http://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.

**BETSY** ([www.betsy-project.org](http://www.betsy-project.org)), an embedded systems project on delivering video streams to handheld devices.

**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

**CBSNET** ([www.cbsenet.org](http://www.cbsenet.org)), a network of organizations promoting component-based technologies.

### DiFens

**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.

**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.

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

**idSpace** ([www.idspace-project.org](http://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.

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

**B3Regions** ([www.b3regions.eu](http://www.b3regions.eu)) innovative project aims to tackle the difficulties of implementing broadband connections in remote or disadvantaged areas.

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

**MEDICATE** ([www.medicare-online.org](http://www.medicare-online.org)), a telemedicine project on the development of a monitoring platform for home patients.

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

