



Extending a Platform for Ambient Assistive Living

Master Internship 2016

Supervisors

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Project Presentation

We aim in the “City4Age” European project to ensure a quick intervention in case of problem faced by elderly people, and in consequences, increase the number of their independent living years. Therefore, we are working on a service provisioning platform (i.e., Ubismart) that uses Internet of Things technology to ensure assistive services continuity, indoor (houses) and outdoor (cities). The platform is based on ubiquitous technologies (e.g., proximity, presence and contact sensors), wearable technologies (e.g., smartphone, smartwatch), and other outsource services (e.g., weather) in order to understand a situation (of an ageing person), detect a problem, and intervene if necessary. The platform also allows to create intelligent spaces where sensors are easily and dynamically deployed, and reasoning algorithms are put in place (using semantic web).

Expected deliverables

During this internship, the student will work on upgrading "ubismart" platform. She/he will mainly work on the following actions:

- Adapt the communication protocol using a standardized model (e.g., sensorML).
- Integrate new type of sensors in the platform (e.g., vibration sensors).
- Develop a bug monitoring system to be included in "ubismart" platform.

Keywords

Internet of Things, Smart Space, Ambient Assistive Living, sensors.

Required Profile

- Master Degree or Engineer Student (last year of studies).
- Mastering at least one of the following language: Python, Javascript/NodeJS, Java
- Experience in Linux system administration
- Ability to take initiatives, communicate effectively, and turn crazy ideas to running products

Any experience or interest in the following will be appreciated:

- Internet of Things, Sensors
- Academic Research