

ESR2

ESR2 project title- Large-scale crowdsourcing-based wearables data gathering and processing

Lead beneficiary (place of employment) – Tampere University, Finland

Supervisory team - Prof. Jari Nurmi (Tampere University, Finland), Assoc. Prof. Simona Lohan (Tampere University, Finland), Prof. Joaquin Huerta (Universitat Jaume I, Spain) and industrial mentors Jesús de Diego Alarcon and Jelena Stosic (IDOM, Spain)

Project tasks and objectives: To create novel robust approaches for location databases storage, compression and transfer of wearables-based crowdsensed data; to detect outliers and model statistically spurious interferences in crowdsourcing-based wearables data; to study the vulnerabilities of crowdsourced wearables data for public safety and methods to increase the safety; to increase crowdsensing efficiency in terms of data storage and transfer data rates by 40%. The ESR will also have the possibility to participate in the Advisory Board of the network (two ESRs are selected annually by voting among the 15 ESRs of the network). The ESR will also be involved in social media promotion of the network, such as Webropol surveys, Facebook and LinkedIn groups, Youtube video channels, Twitter and blogging.

Mobility/cross-country and cross-sector secondments including industrial training: 6 cumulated months at Universitat Jaume I, Spain and 3 months of industrial experience at IDOM, Spain

Eligibility: MSc degree in a relevant degree obtained after Sep 2015 and not having lived or worked more than 12 cumulative months in Finland during Aug 2016-Aug 2019.

Preferred starting date- September 2019

Trial period - 6 months

Target degree - joint PhD degree from Tampere University, Finland and Universitat Jaume I, Spain

Approximate gross salary – about 3600 EUR/month for researchers without family (and about 4000 EUR/month for researchers with family)

Working and living conditions in Finland - Finland is among the most stable, free and safe countries in the world, based on prominent ratings by various agencies. It is also ranked as one of the top countries as far as social progress is concerned. **Tampere** is counted among the major academic hubs in the Nordic countries and offers a dynamic living environment. Tampere region is one of the most rapidly growing urban areas in Finland and home to a vibrant knowledge-intensive entrepreneurial community. The city is an industrial powerhouse that enjoys a rich cultural scene and a reputation as a centre of Finland's information society. Read more about Finland and Tampere:

- <https://www.visitfinland.com/about-finland/>
- <https://finland.fi/>
- https://tem.fi/documents/1410877/2888440/SIS_MIN_E...
- <https://visittampere.fi/en/>
- www.expats-finland.com

The new **Tampere University** and higher education community begin their operations on 1 January 2019. Tampere University of Technology, the University of Tampere and Tampere University of Applied Sciences are building a unique environment for multidisciplinary, inspirational and high-impact research and education and a hub of expertise in technology, health and society. Read more: <https://www.tampere3.fi/en>

Information about the industrial partner - IDOM is an independent international company that delivers professional integrated services in Engineering, Architecture and Consultancy. At present, around 2,500 people carry out their professional activities in the Company's offices and projects across the globe. The company is employee-owned with 100% of the capital of IDOM distributed among the staff currently

working in the firm. The following are the main areas of activity of the company: advanced analysis, architecture, consulting, energy, environment, water, industry, transport, nuclear, telecommunications, and urban planning. In the Consultancy Department – IDOM Digital teams are Specialists in Information Technologies. IDOM activities cover the whole life cycle of an IT Project, from the data acquisition to the design and deployment, including consulting, SW development and system integration.