

ESR3

ESR3 project title- Privacy-aware approaches for wireless IoT localization on wearable devices

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

Supervisory team - Associate Prof. Simona Lohan and Assistant Prof. Sergey Andreev (Tampere University, Finland), Prof. Dragos Niculescu (University “Politehnica” of Bucharest, Romania) and industrial mentors: Dr. Suomi and Dr. Himanen (Digital Living, Finland).

Project tasks and objectives: To identify the privacy and security related challenges in the IoT positioning on wearable devices, from both the network-side and the user point of view; to define the Key Performance Indicators of privacy, robustness, and security of a localization algorithm on a wearable device; to develop passive localization methods for future wireless networks and cellular IoT standards, such as 802.11az, LP-WPANs, etc.; to test the methods in an industrial setting focused on digitalized society. 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: 9 cumulated months at University “Politehnica” of Bucharest, Romania and 3 months of industrial experience at Digital Living, Finland

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 –*double PhD degree from Tampere University, Finland and University “Politehnica” of Bucharest, Romania

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

Additional skills - knowledge in any of the followings will be considered a bonus: Data Security & Privacy, semantic web/web technologies; service design /user-centered design; trustworthy data

*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 - **Digital Living*** is an innovation intensive SME with leading expertise in digital transformation (www.digitalliving.fi), established in 2012, originated from Digital Living Finland Oy since 2008). Digital Living provides an easy way to roll-out disruptive digital strategies for enterprises to capitalise on global explosion of data economy. As a data operator service provider, Digital Living brings data vendors and application developers together in a digital market place to enable the value creation with data reserves and the development of more intelligent applications with richer content for end users.