

ESR1

ESR1 project title- **Energy-efficient edge computing based gateways for wearable networks**

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

Supervisory team - Prof. Jari Nurmi (Tampere University, Finland), Prof. Antonio Iera (Università Mediterranea di Reggio Calabria, Italy), industrial mentors: Ilaria Lener and Dr. Antonella Pasani (T6 Ecosystems)

Project tasks and objectives: To reduce the energy of individual communications system blocks in wearable networks by up to 90-95% by applying approximate computing; to highly optimize the edge-based wearable network gateways; to improve edge/fog computing capabilities, security features and energy-efficiency; to implement a proof-of-concept on a programmable/ reconfigurable communications platform such as NI URSPs. 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: 12 cumulated months at Università Mediterranea di Reggio Calabria, Italy and 2 months of industrial experience at T6 Ecosystems, Italy

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

Preferred starting date- August 2019

Trial period - 6 months

Target degree -double PhD degree from Tampere University, Finland and Università Mediterranea di Reggio Calabria, Italy

Approximate gross salary – about 3600 EUR/month

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.expatsfinland.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 - **T6 ECOSYSTEMS** is an Italian SME carrying on consulting and research activities with extensive experience in participating and co-ordinating national and international

research and innovation projects. T6 ECOSYSTEMS provides strategic Training and Consultancy to Public Administrations and private enterprises (especially SMEs) regarding innovation of process use of ICT technologies and knowledge transfer, project management, funds rising and European project development.

Additional information:

The selected ESR for this position will have to additionally complete these steps after she/he gets the positive decision about her/his application, in order to comply with the Italian legislation on registering to a double PhD degree with an Italian university:

1. Those who are in possession of a foreign academic qualification, which has not already been declared equivalent to an Italian degree, have to enclose all the documents translated and legalized by the competent Italian representation in accordance to the set of rules in force relating to the admission of foreign students to the courses in Italian Universities, which are useful to enable the Commission that guarantees admission to the doctoral program, to assess the equivalence in compliance with current legislation in this field in Italy and in the country where the qualification was issued and with the treaties or international agreements concerning the recognition of qualifications for further studies.
2. Non-EU citizens will have to enclose to the application form all the titles translated and legalized by the Italian Embassy in accordance with the applicable standards for the admission of foreign students to Italian Universities