

ESR14

ESR14 project title- Social-aware discovery and data exchange among IoT devices over Edge Computing

Lead beneficiary (place of employment) – Università Mediterranea di Reggio Calabria, Italy

Supervisory team - Prof Antonio Iera and Assoc. Prof. Antonella Molinaro (Università Mediterranea di Reggio Calabria, Italy), Prof. Jari Nurmi and Prof. Evgeny Koucheryavy (TUT), and industrial mentor: Johan Torsner (Ericsson, Finland)

Project tasks and objectives: Create novel interaction paradigms also taking into account the social and opportunistic relationships and interactions between entities involved in the Large-scale Smart Environments (LSE); Evaluate the role of social networks of objects in enabling the uprising paradigm of Internet of Wearable Things (IoWT); Offer suitable architecture for properly exploiting Cloud and Fog computing paradigms in a joint way to support effective data exchange among IoT and IoWT devices moving across LSEs; Investigate the virtualization of IoT devices in fog/edge infrastructures. 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 Tampere University, Finland and 2 months of industrial experience at Ericsson, Finland

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

Preferred starting date- October 2019

Trial period - 12 months

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

Approximate gross salary – about 2900 EUR/month

Working and living conditions in Italy

Italy is one of the most visited countries of European Union for its rich culture, cuisine, history, fashion and art, its beautiful coastline and beaches, its mountains, and priceless ancient monuments. The city of Reggio Calabria is located on the “toe” of the Italian Peninsula and separated from the island of Sicily by the Strait of Messina. It is situated on the slopes of the Aspromonte, a long, craggy mountain range that runs up through the centre of the region. The third economic centre of mainland Southern Italy, the city proper has a population of more than 200,000 inhabitants spread over 236 square kilometres (91 sq mi), while the fast-growing urban area numbers 260,000 inhabitants. About 560,000 people live in the metropolitan area, recognised in 2015 by Italian Republic as a metropolitan city.

- <http://www.italia.it/en/home.html>
- <https://www.italiantourism.com/>
- <http://www.turiscalabria.it/website/>
- <http://turismo.reggiocal.it/HomePage.aspx?lang=en-US>

The “**Mediterranea**” University, located in Reggio Calabria, is organized in 6 Departments and almost 100 didactic or research laboratories are involved in these departments. The research potential consists of 54 Full Professors, 91 Associate Professors, 107 Researchers, to which over 100 young researchers are to be added, engaged with research grants or doctoral degrees. The mission of the “Mediterranea” University consists in promoting the development of Calabria and of the entire country through research, teaching and the quality of the services provided to the students and to the region, the spreading of values for the civil and ethic developing of the community, the innovation, the spreading of technological and professional know-how by cooperating with economic and social operators, research centres, national and international institutions with a special regard to the Mediterranean area. Read more: <http://www.unirc.it/en/>

Information about the industrial partner – **Ericsson** is a global leader in delivering ICT solutions. In fact, 40% of the world’s mobile traffic is carried over Ericsson’s networks. Ericsson has customers in over 180 countries and comprehensive industry solutions ranging from Cloud Services and Mobile Broadband to Network Design and Optimization. Ericsson’s services, SW, and infrastructure – especially in mobility, broadband, and the cloud – are enabling the communications industry and other sectors to do better business, increase efficiency, improve user experience, and capture new opportunities. Ericsson has one of the industry’s strongest patent portfolios with a total count of over 42,000 granted patents. R&D is at the heart of ERI’s business with approximately 23,700 employees dedicated to R&D activities. This commitment to R&D allows Ericsson to drive forward the vision for a Networked Society – one where everyone and everything is connected in real time – enabling new ways to collaborate, share, and get informed.

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