ESR4

ESR4 project title- **5G and mmWave capabilities in wearable applications**

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

Supervisory team - Prof. Evgeny Koucheryavy and Assistant Prof. Sergey Andreev (Tampere University, Finland), Prof. Jiri Misurec and Assoc. Prof. Jiri Hosek (Brno University of Technology, Czech republic), and industrial mentor Johan Torsner (Ericsson, Finland).

Project tasks and objectives: To understand deeply the networking constraints and trust challenges of emerging wearables in mmWave bands; to ensure that wearable-centric information is produced and consumed appropriately by a multitude of devices and users of future 5G networks; to study mmWave interference in commuters equipped with AR/VR glasses; to develop a proof-of-concept demonstrator for mmWave wearable communications and networking. 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 Brno University of Technology, Czech republic and 3 months of industrial experience at Ericsson, Finland

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 –joint PhD degree from Tampere University, Finland and Brno University of Technology, Czech republic

Approximate gross salary – about 3600 EUR/month

Additional skills knowledge in any of the followings will be considered a bonus: knowledge of modern wireless standards, familiarity with mmWave-based communications

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.expat-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 – **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