Fully Funded PhD Scholarship: Next Generation Wireless Networks and Machine Learning

Applications are invited for a PhD joint position in the School of Computer Science and Statistics (SCSS), Trinity College Dublin (TCD) and the Research Centre CONNECT, in collaboration with NEC Laboratories Europe. TCD is the top ranked University in Ireland, and CONNECT is the world leading SFI Research Centre for Future Networks and Communications.

**Topic:** Today we are witnessing the impressive transformation of wireless networks. The demand has dramatically shifted from voice to data-hungry and low-latency communication and computing services, and new types of users have emerged such as autonomous vehicles and Internet-of-Things devices. In order to address these challenges, the next generation wireless systems need to employ forward-looking solutions such as network function virtualization technologies, software-defined network architectures, and mobile edge computing platforms. At TCD we are working at the nexus of these game-changing ideas, developing an experimentally-validated analytical framework that leverages machine learning for the design of 5G systems. Special emphasis is given on emerging services such as rich-media applications, intelligent transportation applications, and industry automation. This PhD position is offered in collaboration with NEC Laboratories Europe, the 5G Networks R&D Group.

**Environment:** The successful applicant will join the SoftEdge project team in CONNECT, and will have the opportunity to collaborate closely (through regular visits and internships) with the 5G Group at NEC Laboratories in Heidelberg, Germany. CONNECT is a national research centre that brings together world-class expertise from ten Irish academic institutes and over 35 companies including large multinationals, SMEs and start-ups. SCSS and CONNECT have an active international visitor programme and provide the opportunity for international and industry exchange visits during the course of the PhD. Moreover, in our structured PhD programme leading international researchers provide specialist postgraduate modules to support our research students.

**Candidate Profile:** Graduates applying for this position should have the following:

- Strong motivation to tackle challenging research problems
- B.Sc., M.Sc. or equivalent in Mathematics, Computer Science, Engineering or a related field
- Strong interest in applied mathematics; prior research experience is a plus.
- Excellent academic results (first-class honours or equivalent)
- Very good level of spoken and written English

Applications from excellent candidates in related topics will be also considered.

**Stipend:** These postgraduate scholarships are open to Irish, EU and international students and carry a stipend of €18,000 (tax free).

**Application:** To apply, candidates should submit a detailed CV and the names and contact details of two referees for letters of recommendation to Prof. G. Iosifidis, email: George.Iosifidis@tcd.ie

Interested candidates are encouraged to apply by May 30, 2018. Position to remain open until filled.

Additional information can be found at https://connectcentre.ie/, www.FutureNetworksTrinity.net ; https://uk.nec.com/en_GB/emea/about/neclab_eu/

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