
Post-Doctoral / Research Engineer Position (M/F)

(Reference: CS_FK_ING_5GNR_052021)

Research topics	OpenAirInterface 5G New Radio development
Department	Communication Systems
Parution date	17.5.2021
Start date	ASAP
Duration	Fixed Term Contract [18 months] potentially leading to Indefinite Term Contract
Description	<p>OpenAirInterface (www.openairinterface.org) is the most complete open-source software stack for 3GPP based 4G and 5G systems that runs on general purpose computing and radio hardware. It is a truly collaborative project with more than 50 contributors from more than 20 institutions worldwide. It was created by Eurecom and is now hosted by the OpenAirInterface Software Alliance. However, Eurecom is still one of the major contributors to the project.</p> <p>In this context, we are actively looking for a developer (m/f) of our 5G New Radio modem with a focus on (but not limited to) the development of the lower layers (PHY and MAC) of both UE and gNB. The development will also include some advanced features of the standard, such as MIMO, mm-wave beamforming, ultra-reliable low-latency communications, industrial IoT, time-sensitive networks, positioning and localization, non-terrestrial networks, etc.</p> <p>EURECOM is also maintaining an experimental 5G radio network on the SophiaTech campus using two frequency allocations for indoor and outdoor 4G/5G radio equipment. This deployment aims to showcase OpenAirInterface (OAI) 5G software tools both for the radio-access and core networking components. This will be a living lab used remotely by the partners of the various projects as well as the general OAI community and hopefully SMEs developing vertical applications for future 5G networks.</p>
Requirements	<p>Education Level / Degree: Master's Degree in Electrical or Computer Engineering. A PhD is also very highly considered, although not absolutely mandatory for the position.</p> <p>Field / specialty: Telecommunications</p> <p>Technologies: Modern Software Engineering tools, Basic radio-network knowledge and familiarity with 3GPP-based systems, especially 5G new radio.</p> <p>Languages / systems: C/C++, Linux networking, community-based open-source software tools (e.g. git, Jenkins)</p> <p>Other skills / specialties: Project Management, 4G/5G radio-access and/or core network protocols (both is a definite plus).</p> <p>Other important elements: Fluency in written and spoken English</p>
Application	<p>The application must include (I, II and III):</p> <ul style="list-style-type: none">• I-Curriculum Vitae• II-Motivation letter• III-Names and addresses of three references <p>Applications should be submitted by e-mail to secretariat@eurecom.fr with the reference : CS_FK_ING_5GNR_052021</p>
Postal address	CS 50193 - 06904 Sophia Antipolis, France
Contact	secretariat@eurecom.fr
Fax number	+33 4 93 00 82 00



EURECOM is a graduate school and a research center in communication systems located in Sophia Antipolis, a vibrant science park on the French Riviera. EURECOM is ranked among the world's top universities in the QS World University Rankings® 2019, considered one of the world's strongest universities in Computer Science & Information Systems and ranked 551/600 worldwide.

Organized as an Economic Interest Group (kind of consortium), EURECOM brings together in its consortium prestigious universities such as the schools from the Institut Mines Télécom group (Télécom Paris, IMT Atlantique, Télécom SudParis, etc.), Aalto University (Helsinki), Politecnico di Torino, Technische Universität München (TUM), Norwegian University of Science and Technology (NTNU), Chalmers University of Technology (Sweden), Czech Technical University in Prague (CTU), ITMO University (St Petersburg), University of Liège (ULiège) and EDHEC Business School, as well as industry members such as BMW Group, IABG, Orange, SAP, NortonLifeLock and the Principality of Monaco as an institutional member.

EURECOM has developed its expertise around three major fields: Digital Security, Data Science and Communication Systems. EURECOM is particularly active in research in its areas of excellence while also training a large number of doctoral candidates. Its contractual research, in which its industrial members actively participate, is widely recognized in Europe and contributes largely to its budget. It's strong links with various industries has enabled EURECOM, with the Institut Mines Télécom, to obtain the Carnot label, a label granted to research organizations which put partnership research at the heart of their strategy.