

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

(Reference: CS_FK_ING_5GNR_012023)

Research topics OpenAirInterface 5G New Radio development

Department Communication Systems

Parution date 20/01/2023 Start date ASAP

Duration Fixed Term Contract [18 months] potentially leading to Indefinite Term Contract

are enthusiastic about open source software.

Description The Communication Systems department of EURECOM is looking for a Post Doctoral

researcher for a collaborative research project on time sensitive networking (TSN) in private 5G networks. The project aims at making safe, reliable and real-time end-to-end communication over and in private 5G campus networks available with leading industry companies in France and Germany. EURECOM's role in the project is to develop TSN features into the OpenAirInterface open source software at both the radio access and the core network. We are looking for candidates with a PhD in electrical engineering or similar with a good understanding of 3GPP 5G systems, good software development skills and who

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.

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 living lab is used remotely by the partners of the various projects as well as the general OAI community for interoperability testing and experimentation with private 5G networks.

Requirements

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.

Field / specialty: Telecommunications

Technologies: Modern Software Engineering tools, Basic radio-network knowledge and familiarity with 3GPP-based systems, especially 5G new radio.

Languages / **systems**: C/C++, Linux networking, community-based open-source software tools (e.g. git, Jenkins)

Other skills / specialties: Project Management, 4G/5G radio-access and/or core network protocols (both is a definite plus).

Other important elements: Fluency in written and spoken English

Application The application must include (I, II and III):

I-Curriculum Vitae

II-Motivation letter

• III-Names and addresses of three references

Applications should be submitted by e-mail to secretariat@eurecom.fr with the reference: CS_FK_ING_5GNR_05012023

Postal address CS 50193 - 06904 Sophia Antipolis, France

Contact secretariat@eurecom.fr



About EURECOM

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 consortiumprestigious 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.

Social advantages

- Attractive salary
- Employee profit sharing policy (profit sharing)
- Company health cover (mutual) with high levels of guarantees for the whole family (employer participation of 60%)
- Restaurant vouchers (60% employer contribution)
- Geographical location (Campus Sophia Antipolis (BIOT-Côte d'Azur)
- International and multicultural environment

Career Benefits

- Innovative research opportunity
- Opportunity to collaborate with a world industrial leader in communication technologies

Important information

- * EURECOM has a dynamic policy in terms of inclusion and quality of life at work. EURECOM is committed to diversity and gives equal consideration to all applications, without discrimination.
- * All our positions are open to people with disabilities. EURECOM has a disability referent to support, advise, organize any adjustments and make positive commitments in favor of personalized integration.
- * EURECOM, as part of its gender equality plan, encourages male applications for administrative positions, traditionally held by women, and female applications for research positions, traditionally held by men.
- * EURECOM carries out positive actions within the framework of its CSR policy. A CSR referent guides EURECOM's policy in terms of CSR and energy transition (electric charging stations, solar panels, waste sorting, etc.)
 English is the official and only language.