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

(Reference: CS_AK_ING_MEC_012018)

Research topics **Mobile Edge Computing (MEC)**

Department Communications Systems

Parution date 24/01/2018

Start date ASAP

Duration 18 months

Description Mobile Edge Computing (MEC) is about providing computing capabilities at the edge of mobile networks. MEC allows hosting applications and services close to end users, reducing considerably the end-to-end latency. Besides enabling low latency applications, like automotive driving, MEC will foster innovation by providing real time and pertinent information on the RAN as well as the Core network to develop novel applications. Example of such applications are video streaming, which may adapt the rate according to the User channel quality; RAN optimization application that may take profit from machine learning techniques to handle high amount of RAN data and predict the RAN status.

EURECOM has recently developed a MEC framework based on OpenAirInterface (OAI), open source components for eNodeB and Core Network. The MEC framework is based on ETSI specifications. The current version of the MEC framework mainly provides two services: Radio Network Information Service (RNIS) and traffic control, but we expect more services in the future. The MEC services allow via a REST API to interact with the mobile network to monitor radio information or modify the user data plane.

In the context of an industrial project, we are seeking for a motivated Post-Doc to work on the MEC platform. The candidate will leverage the existing platform by: (i) improving the existing MEC services; (ii) devising novel MEC applications that take advantage from the data gathered using the MEC API. The candidate will actively participate to the industrial projects by attending meetings and writing deliverables and scientific papers.

- Requirements**
- Education Level / Degree: PhD. degree
 - Field / specialty: Computer science, electrical engineering, telecommunications, or applied mathematics.
 - Technologies: A very good background current LTE technology, ETSI NFV and SDN
 - Languages / systems: C and python programming and Very good knowledge in Linux OS
 - Other skills / specialties: Good knowledge on machine learning and optimization, Demonstrate an excellent level of spoken and written English.



- Application** The application must include (I, II and III):
- I-Curriculum Vitae
 - II-Motivation letter of two pages also presenting the perspectives of research and education
 - III- Two reference letters
- Applications should be submitted by e-mail to secretariat@eurecom.fr with the reference : CS_AK_ING_MEC_012018**
- Postal address** CS 50193 - 06904 Sophia Antipolis, France
- Contact** secretariat@eurecom.fr
- Fax number** +33 4 93 00 82 00

EURECOM is a French graduate school and a research center in digital sciences based in the international science park of Sophia Antipolis, which brings together renowned universities such as Télécom ParisTech, Aalto University (Helsinki), Politecnico di Torino, Technische Universität München (TUM), Norwegian University of Science and Technology (NTNU), Chalmers University (Sweden) and Czech Technical University in Prague (CTU). The Principality of Monaco is a new institutional member. The Institut Mines-Télécom is EURECOM's founding member.

EURECOM benefits from a strong interaction with the industry through its specific administrative structure: Economic Interest Group (kind of consortium), which brings together international companies such as: Orange, BMW Group Research & Technology, Symantec, Monaco Telecom, SAP, IABG.

EURECOM deploys 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 is recognized across Europe and contributes largely to its budget.

Thanks to its strong ties set up with the industry, EURECOM was awarded the "Institut Carnot" label jointly with the Institut Telecom right from 2006. The Carnot Label was designed to develop and professionalize cooperative research. It encourages the realization of research projects in public research centers that work together with socioeconomic actors, especially companies.