**Post-Doctoral / Research Engineer Position (M/F)**  
(Reference: CS_FK_ING_5GNR_032019)

<table>
<thead>
<tr>
<th>Research topics</th>
<th>OpenAirInterface 5G New Radio development</th>
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<tbody>
<tr>
<td>Department</td>
<td>Communication Systems</td>
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<td>Parution date</td>
<td>08/03/2019</td>
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<td>Start date</td>
<td>ASAP</td>
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<td>Duration</td>
<td>Fixed Term Contract [18 months maximum]</td>
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| Description              | In the context of several running and upcoming 5G European H2020 projects (5G-EVE, EMPOWER, 5GENESIS) as well as national projects (MASS-START), EURECOM is engaged deploying an experimental 5G radio network on the SophiaTech campus using two frequency allocations for indoor and outdoor 4G/5G radio equipment granted by the French regulatory body (ARCEP). 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.  

OpenAirInterface is an open-source software that implements 3GPP systems on off-the-shelf radio and computing hardware. Recently we have started to implement 5G New Radio on top of our already existing 4G development. 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 MIMO features of the standard. |
| 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, MIMO systems.  
                            • Languages / systems: C/C++, Linux networking, community-based open-source software tools (e.g. git, Jenkins)  
                            • Other skills / specialities: 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 of two pages also presenting the perspectives of research and education  
                            • 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_032019

EURECOM specifically encourages women to apply with a view towards increasing the proportion of female researchers.
EURECOM is a French graduate school and a research center in communication systems 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), Vietnam National University Ho Chi Minh Ville (VNU) and Chalmers University (Sweden). 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: Swisscom, SFR, Orange, ST Microelectronics, BMW Group Research & Technology, Symantec, Monaco Telecom, SAP, IABG.

EURECOM deploys its expertise around three major fields: Networking and security, Multimedia Communications and Mobile Communications. 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.