
Postdoc Position in Wireless Communications (M/W)

(Ref : CS_DS_TCL_102017)

Research topic	5G Waveforms for Machine Type Communications and Ultra Long Range Communications
Department	Communication Systems
Opening date	October 2017
Start date	ASAP
Duration	12 months with possible extension of six months
Description	<p>The successful applicant will work in an international bilateral cooperation between EURECOM and TCL aiming at designing and analyse 5G Waveforms for Machine Type Communications (MTC) and Ultra Long Range (ULR) Communications. The post-doctoral work will be focused on the comparative analysis and design of 5G waveform candidates identified in Rel.15 WIs for MTC and ULR services. The key aspects to be investigated are the flexibility of these waveforms w.r.t. numerology (different parameters) and methods for coexistence between different numerologies, innovative solutions for coverage enhancements aiming at supporting ULR and MTC profiles, and support of TCL in its standardization activities related to this topic for 3gpp Rel.16.</p> <p>This position offers the opportunity to work on one of the most hot and urgent standardization topic nowadays and to learn about the fundamental aspects that drive the design of the 5G wireless systems. The successful candidate will be strongly encouraged to publish in the most prestigious journals in the field and to propose innovative ideas for patents with opportunities of close research collaborations with TCL.</p>
Requirements	Candidates should have a PhD in communication engineering, a strong research and publication record, and a high level of independence and autonomy in developing original research. The successful applicant has a strong background in multiuser communications from a communication theoretical and/or a signal processing perspective. Additionally, a background on the topic of waveform design will be considered an advantage.
Application	<ul style="list-style-type: none">• Curriculum with relevant achievements, knowledge, expertise• Statement of purpose: academic interests and future goals• List of publications with indication of the two most relevant articles• Contact information of two reference persons <p>Applications should be submitted by e-mail to secretariat@eurecom.fr and dirk.slock@eurecom.fr sous la référence CS_DS_TCL_102017</p>
Postal address	CS 50193 - 06904 Sophia Antipolis, France
Contact	Prof. Dirk Slock http://www.eurecom.fr/en/people/slock-dirk
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, ST Microelectronics, BMW Group Research & Technology, Symantec, Monaco Telecom, SAP, IABG.

EURECOM deploys its expertise around three major fields: 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.