
Research topics	Disaggregated 5G/6G Hardware/Software Computing Architectures
Position (M/F)	PhD, thesis offer
Reference offer	CS/RK/6G/PhD/032023
Research Department	Communication Systems
Publication date	22/03/2023
Start date	ASAP
Duration	Duration of the thesis
Description	

In the context of a running Horizon Europe project, CoreNext <https://www.barkhauseninstitut.org/en/corenext-trustworthiness-and-sustainability-for-6g>, EURECOM is engaged alongside academic and industrial partners to devise EU-sovereign computing and communications technologies for 5G/6G disaggregated networking components. For EURECOM, this will involve evolution of OpenAirInterface (OAI) 5G prototyping software solutions to incorporate new hardware accelerator technologies such as those found on current generation DPU. Porting of OAI to open-hardware architectures such as RISC-V will be coupled with acceleration solutions from partners both for baseband and user-plane packet processing functions. Trustworthy solutions for multi-vendor/tenant data-center deployments will be targeted. Candidates will be expected to produce cutting-edge prototyping solutions and disseminate in the highest quality IEEE/ACM conferences and journals.

Requirements

- Education Level / Degree: Masters Degree in Electrical or Computer Engineering. A PhD in a related area is clearly mandatory for post-doctoral candidates.
- Field / specialty: Telecommunications
- Technologies: Radio signal processing and/or real-time packet processing and familiarity with 3GPP-based systems, High-Speed Networking, Modern Software Engineering tools, Data Center Technologies.
- Languages / systems: C/C++, Linux development and prototyping environments
- Other skills / specialties: Project Management, 4G/5G radio-access and/or core network protocols.
- Other important elements: Fluency in written and spoken English

Application

The application must include :

- Curriculum Vitae
- Motivation letter of two pages also presenting the perspectives of research and education

Applications should be submitted by e-mail to secretariat@eurecom.fr with the reference : **CS/RK/6G/PhD/032023**



About EURECOM

EURECOM is a major Engineering School and a Research Center in digital sciences founded in 1991 as a consortium in the international technology park of Sophia Antipolis. The IMT is a founding member of the GIE. Teaching and research activities are organized around 3 promising fields: digital security, communication systems and Data Science.

EURECOM has a staff of 150 (researchers and support teams) and welcomes 400 international students on the Campus Sophia Tech, the largest information science and technology campus of the region. EURECOM enjoys a privileged geographical environment on the French Riviera (Côte d'Azur), between sea and mountains, at the heart of a dynamic and multidisciplinary ecosystem that promotes high-level scientific and technological innovation.

Social advantages

- Attractive salary
- Employee profit sharing policy
- Company health cover (mutuelle) with high levels of guarantees for the whole family (employer participation of 60%)
- Restaurant vouchers (60% employer contribution)

EURECOM has a dynamic policy in terms of inclusion and quality of life at work, committed to diversity and gives the same consideration to all applications, without discrimination.

EURECOM has a "Mission Handicap" policy. All our positions are open to people with disabilities. A designated disability referent welcomes and provide support to employees and students suffering from a disability. He puts in place the necessary arrangements and makes positive commitments in favour of a personalized integration.

EURECOM, as part of its Annual Gender Equality Plan, practices inclusive recruitment without any kind of gender discrimination. The conditions of employment are identical for women and men. In order to promote the diversity in its teams, EURECOM encourages male applications for administrative positions, traditionally occupied by women, and female applications for teaching/research positions, traditionally occupied by men.

EURECOM carries out positive actions within the framework of its CSR policy. A CSR referent steers EURECOM's policy in terms of CSR and energy transition (electric charging stations, solar panels, selective sorting, etc.).