Job vacancy #2023-06110

Advanced Services Support on top of 5G network

Contract type: Fixed-term contract
Level of qualifications required: Graduate degree or equivalent
Fonction: Temporary scientific engineer
Level of experience: Recently graduated

About the research centre or Inria department

The Inria Université Côte d'Azur center counts 37 research teams as well as 8 support services. The center's staff (about 500 people) is made up of scientists of different nationalities, engineers, technicians and administrative staff. The majority of the center's research teams are located in Sophia Antipolis and five of them are based in an Inria antenna in Montpellier. The Inria branch in Montpellier is growing in size, in accordance with the strategy described in the institution's Contract of Objectives and Performance (COP).

Context

The DIANA team at Inria Sophia Antipolis is hiring one research engineer in the frame of the European Converge projects.

Assignment

The candidate will work on developing post 5G technology. Post 5G networks are a composition of functional blocks that can be designed, implemented, and deployed independently, which allow to follow a cloud native approach to deploy new cellular networks. In parallel to this operational breakthrough, 6G leverages terahertz communications to offer very high speed, low latency data exchanges. However, at high frequencies any obstacle may break communications. To help in solving this problem, meta surfaces can be added to the communication environment and act as low cost, reconfigurable relays between non line-of-sight communicating nodes. These meta-surfaces can be reconfigured live thanks to vision-aided (i.e., video camera) tracking of the environment where communications happen.

Main activities

The candidate will work either on implementing on top of the SophiaNode infrastructure developed at INRIA advanced use cases such mobile base station in RIS enhanced environment.

All work done will be validated on a physical equipment. Special care will be giving on reproducibility, and all contributions will be free and open source.

We are particularly seeking for young profiles. If you're a recent graduate looking to jumpstart your career, we'd love to hear from you!

Skills

- Solid knowledge in: i) networking and/or ii) telecommunication and/or iii) 5G standards
- Experience with DevOps techniques and system development
- Excellent writing, communication and presentation skills in English
- Ability to travel within Europe

Benefits package

- Subsidized meals
- Partial reimbursement of public transport costs
- Leave: 7 weeks of annual leave + 10 extra days off due to RTT (statutory reduction in working hours) + possibility of exceptional leave (sick children, moving home, etc.)
Possibility of teleworking and flexible organization of working hours
- Professional equipment available (videoconferencing, loan of computer equipment, etc.)
- Social, cultural and sports events and activities
- Access to vocational training
- Contribution to mutual insurance (subject to conditions)

Remuneration
From 2652 € gross monthly (according to degree and experience)

General Information
- Theme/Domain: Networks and Telecommunications
  System & Networks (BAP E)
- Town/city: Sophia Antipolis
- Inria Center: Centre Inria d'Université Côte d'Azur
- Starting date: 2023-09-01
- Duration of contract: 1 year, 6 months
- Deadline to apply: 2023-12-31

Contacts
- Inria Team: DIANA
- Recruiter: Dabbous Walid / Walid.Dabbous@inria.fr

About Inria
Inria is the French national research institute dedicated to digital science and technology. It employs 2,600 people. Its 200 agile project teams, generally run jointly with academic partners, include more than 3,500 scientists and engineers working to meet the challenges of digital technology, often at the interface with other disciplines. The Institute also employs numerous talents in over forty different professions. 900 research support staff contribute to the preparation and development of scientific and entrepreneurial projects that have a worldwide impact.

Warning: you must enter your e-mail address in order to save your application to Inria. Applications must be submitted online on the Inria website. Processing of applications sent from other channels is not guaranteed.

Instruction to apply
Defence Security:
This position is likely to be situated in a restricted area (ZRR), as defined in Decree No. 2011-1425 relating to the protection of national scientific and technical potential (PPST). Authorisation to enter an area is granted by the director of the unit, following a favourable Ministerial decision, as defined in the decree of 3 July 2012 relating to the PPST. An unfavourable Ministerial decision in respect of a position situated in a ZRR would result in the cancellation of the appointment.

Recruitment Policy:
As part of its diversity policy, all Inria positions are accessible to people with disabilities.