2019-01469 - Post-Doctoral Research Visit F/M NFV APPLICATION DESIGN

Contract type : Public service fixed-term contract
Level of qualifications required : PhD or equivalent
Fonction : Post-Doctoral Research Visit

About the research centre or Inria department

Inria is a national research institute dedicated to digital sciences that promotes scientific excellence and transfer. Inria employs 2,400 collaborators organised in research project teams, usually in collaboration with its academic partners. This agility allows its scientists, from the best universities in the world, to meet the challenges of computer science and mathematics, either through multidisciplinarity or with industrial partners. A precursor to the creation of Deep Tech companies, Inria has also supported the creation of more than 150 start-ups from its research teams.

Inria effectively faces the challenges of the digital transformation of science, society and the economy.

Context

This postdoc is in the framework of Nokia Bell Labs - Inria joint lab. The research activity will be carried out at Nokia Bell Labs Paris/Saclay, but periodic visit to Inria Sophia Antipolis Méditerranée may be envisaged.

About the research activity at Bell Labs, described in recent publications from Nokia research group [9] [10], the postdoc collaborator will work on the definition, implementation, and experimental evaluation of high-performance modular NFV techniques.

The applications being considered are the following:

- Carrier-grade mobile applications, possibly with security-related objectives;
- Flow-level traffic processing, e.g., TCP gateways and other per-connection solutions to enhance performance of mobile networks with a focus on 5G mobile back-haul;
- Low-latency processing of radio samples from remote antennas for 5G front-haul;
- Datacenter applications handling high-throughput flows and I/O intensive functions;
- Enterprise networks and virtual Customer Premise Equipment (xCPE);

Application file: Applications must be submitted online on the Inria website.

Instruction to apply

Application file Applications must be submitted online on the Inria website. Processing of applications sent from other channels is not guaranteed.

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.

Recruitment Policy:

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

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.
User device support (NFV capabilities installed in users’ gateways/set-top boxes, ...).

The postdoc will build on our on-going work and the performance evaluation will be carried out by means of system simulations (NS3 simulator) and of experimental evaluation (using the Grid5000 and/or PlanetLab testbed platforms).

The candidate(s) will collaborate with researchers working in other Bell Labs locations, may interact with Nokia Business Groups, and is expected to contribute to scientific papers and to the development of our system infrastructure. The duration of this postdoc is 18 months.


Main activities

Research activity

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 (after 6 months of employment) 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
- Social security coverage

Remuneration

Gross Salary: 2650 brutto per month