Offer #2025-09103

Post-Doctoral Research Visit F/M Control for neural network analysis

Contract type : Fixed-term contract

Level of qualifications required : PhD or equivalent

Fonction : Post-Doctoral Research Visit

Level of experience : From 3 to 5 years

About the research centre or Inria department

The Inria centre at Université Côte d'Azur includes 37 research teams and 8 support services. The centre's staff (about 500 people) is made up of scientists of di?erent nationalities, engineers, technicians and administrative staff. The teams are mainly located on the university campuses of Sophia Antipolis and Nice as well as Montpellier, in close collaboration with research and higher education laboratories and establishments (Université Côte d'Azur, CNRS, INRAE, INSERM ...), but also with the regional economic players.
With a presence in the fields of computational neuroscience and biology, data science and modeling, software engineering and certification, as well as collaborative robotics, the Inria Centre at Université Côte d'Azur is a major player in terms of scientific excellence through its results and collaborations at both European and international levels.

Context

The postdoc is funded by the project PDE-AI of PEPR IA. The recruited researcher will work with people from McTAO team in Sophia Antipolis and LJAD CNRS math lab in Nice.

https://pde-ai.math.cnrs.fr

Assignment

For a better knowledge of the proposed research subject :

A state of the art, bibliography and scientific references are available at the following URL:
https://pde-ai.math.cnrs.fr/nice/postdoc-nice-1/

Collaboration :
The recruited person will work in collaboration with Jean-Baptiste Caillau and Ludovic Rifford.

Main activities

Main activities (5 maximum):

- bibliographic study and state of the art in neural network and control
- propose and validate innovative approaches in connection with machine learning
- present the work in scientific conferences and research papers

Skills

Technical skills and level required : control, optimisation, machine learning, scientific software dev

Languages : Julia

Relational skills : ability to work within a team

Other valued appreciated :

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

Duration: 22 months
Location: Sophia Antipolis, France
Gross Salary per month: 2788€ brut per month

General Information

- **Theme/Domain :** Optimization and control of dynamic systems
  Instrumentation et expérimentation (BAP C)

- **Town/city :** Sophia Antipolis
- **Inria Center :** Centre Inria d'Université Côte d'Azur
- **Starting date :** 2025-10-01
- **Duration of contract :** 1 year, 10 months
- **Deadline to apply :** 2025-08-03

Contacts

- **Inria Team :** MCTAO
- **Recruiter :**
  Caillau Jean-baptiste / jean-baptiste.caillau@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.

The keys to success

The candidate should have a PhD in math / applied math. A strong background in control / optimisation / machine learning is a definite asset for this position, as well as a taste for applications.

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.