



Offer #2025-09136

Post-Doctoral Research Visit F/M Dual bounds for adjustable robust optimization problems

Contract type : Fixed-term contract

Level of qualifications required : PhD or equivalent

Fonction : Post-Doctoral Research Visit

Context

This position is offered within the ANR (Agence National de Recherche) project DROI - Primal and dual bounds for adjustable robust optimization. The person recruited will be employed by Inria within the project-team EDGE.

Team EDGE is hosted at the Mathematics Institute of Bordeaux (IMB).

The recruited person will automatically integrate IMB and perform his/her daily activities there.

The person will also benefit from the dynamic research environment of team EDGE with multiple industrial collaborations, regular seminars and team meetings.

Assignment

The recruited person will be responsible for research and development within the project.

The goal of the project is to propose mathematical formulations and solution algorithms for optimization problems that will provide dual bounds for adjustable robust optimization problems.

The project will span all aspects of applied research from methodological development to algorithmic implementation and proof-of-concept numerical experimentation.

Main activities

Main activities:

- Review of relevant literature,
- Developing methodology, proposing algorithmic solutions and implementing said solutions
- Presenting the progress to the scientific community
- Writing progress reports/scientific articles

Additional activities:

- Teaching responsibilities and scientific dissemination
- Supervising masters' students

Skills

Technical skills and level required:

- Strong background in mixed-integer programming, PhD level
- Knowledge and expertise in optimization under uncertainty approaches, PhD level
- Experience in decomposition methods and numerical implementation, PhD level

Languages: English and French

Relational skills:

- Strong oral and written communication
- Scientific curiosity
- Appetite for learning new subjects and skills

Benefits package

- Subsidized meals
- Partial reimbursement of public transport costs
- 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
- Social security coverage

Remuneration

2927€ / month (before taxes)

General Information

- **Theme/Domain** : Optimization and control of dynamic systems
- **Town/city** : Talence
- **Inria Center** : [Centre Inria de l'université de Bordeaux](#)
- **Starting date** : 2025-10-01
- **Duration of contract** : 12 months
- **Deadline to apply** : 2025-08-10

Contacts

- **Inria Team** : [EDGE](#)
- **Recruiter** :
Arslan Ayse Nur / ayse-nur.arslan@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

We are searching for highly motivated candidates with a strong background in mixed-integer programming. Knowledge and expertise in optimization under uncertainty approaches such as robust optimization and/or stochastic programming is highly appreciated.

Experience in decomposition methods and numerical implementation is a plus.

The person is expected to integrate a very dynamic research environment with several industrial collaborations. Scientific curiosity and autonomy are essential qualities.

A capacity for oral and written communication in english and/or french is highly valued.

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

Thank you to send:

- CV
- Cover letter
- Support letters (mandatory)
- List of publications

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.