

# Offer #2024-08422

# Research internship: hydrology-guided underground model for realistic terrains

Level of qualifications required: Master's or equivalent

Fonction: Internship Research

## About the research centre or Inria department

The Inria center at Université Côte d'Azur includes 42 research teams and 9 support services. The center's staff (about 500 people) is made up of scientists of different 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 internship will take place at Inria Sophia Antipolis in the GRAPHDECO group (<a href="http://team.inria.fr/graphdeco">http://team.inria.fr/graphdeco</a>), in collaboration with BRGM. Inria will provide a monthly stipend of around 1400 euros for EU citizens in their final year of masters, and ~600 euros for other candidates.

## **Assignment**

The detailed topic is available here: <a href="https://www-sop.inria.fr/members/Guillaume.Cordonnier/thesis/2025/HydroTerrains.pdf">https://www-sop.inria.fr/members/Guillaume.Cordonnier/thesis/2025/HydroTerrains.pdf</a>

#### Main activities

Research internship: literature survey, prototyping, experiments, and reporting.

#### **Skills**

Candidates should have strong programming and mathematical skills with knowledge in computer graphics and experience in Python data science libraries.

# 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
- Contribution to mutual insurance (subject to conditions)

#### Remuneration

Traineeship grant depending on attendance hours.

#### **General Information**

• Theme/Domain: Interaction and visualization

Scientific computing (BAP E) Town/city: Sophia Antipolis

- Inria Center: Centre Inria d'Université Côte d'Azur
- Starting date: 2025-02-03 • Duration of contract: 6 months • Deadline to apply: 2025-01-31

#### **Contacts**

• Inria Team: GRAPHDECO

Recruiter:

Cordonnier Guillaume / guillaume.cordonnier@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

Applications must be submitted online on the Inria website. Collecting applications by 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. An unfavourable Ministerial decision in respect of a position situated in a ZRŔ 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.