Offer #2021-04153

Data Scientist in Pl@ntNet team

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 Sophia Antipolis - Méditerranée center counts 34 research teams as well as 7 support departments. The center's staff (about 500 people including 320 Inria employees) is made up of scientists of different nationalities (250 foreigners of 50 nationalities), engineers, technicians and administrative staff. 1/3 of the staff are civil servants, the others are contractual agents. The majority of the center's research teams are located in Sophia Antipolis and Nice in the Alpes-Maritimes. Four teams are based in Montpellier and two teams are hosted in Bologna in Italy and Athens. The Center is a founding member of Université Côte d'Azur and partner of the I-site MUSE supported by the University of Montpellier.

Context

The person recruited will work in the Pl@ntNet research and development team, composed of engineers, computer scientists and botanists working in two laboratories: the Montpellier Computer Science Research Laboratory (LIRMM, Inria ZENITH team) and the AMAP mixed research laboratory. The Pl@ntNet team is a world pioneer in the application of AI technologies to biodiversity.

In particular, the position will take place in the context of a French research project (CARPESO) aimed at developping innovative digital agricultural technologies.

Assignment

The main mission will be the development of a tool for counting seeds in images via deep learning approaches. This will be done in the continuity of a previous development based on pytorch and a U-Net segmentation model.

Main activities

Main activities (5 maximum) :

- Handling of existing framework

- Re-training of the existing model based on new training data and evaluation

- experimentation with other types of models/architectures and evaluation

- integration of the best model in the existing web demonstrator

Skills

Technical skills and level required : python, pytorch, web technologies

Languages : English or French

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

From 2632 euros gross monthly (according to degree and experience)

General Information

- **Theme/Domain** : Vision, perception and multimedia interpretation
  Biologie et santé, Sciences de la vie et de la terre (BAP A)
- **Town/city** : Montpellier
- **Inria Center** : Centre Inria d'Université Côte d'Azur
- **Starting date** : 2022-01-03
- **Duration of contract** : 6 months
- **Deadline to apply** : 2021-12-12

Contacts

- **Inria Team** : ZENITH
- **Recruiter** :
  Joly Alexis / Alexis.Joly@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

Experience in training deep learning models, ideallly with pytorch and for image processing

> **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.