Offer #2022-05277

Post-Doctoral Research Visit F/M Postdoctoral fellow in computer vision / deep learning for fighting against human trafficking for the European HEROES Project

Contract type : Fixed-term contract

Renewable contract : Yes

Level of qualifications required : PhD or equivalent

Fonction : Post-Doctoral Research Visit

About the research centre or Inria department

The Inria Sophia Antipolis - Méditerranée center counts 34 research teams as well as 8 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 Inria STARS team is seeking a Post Doctoral researcher with a solid background in computer vision. We are especially interested in candidates with backgrounds in computer vision, deep learning, machine learning, and applied mathematics.

The candidate is expected to conduct object detection/tracking research, specifically in videos for human trafficking for the **HEROES Project** - Novel Strategies to Fight Child Sexual Exploitation and Human Trafficking Crimes and Protect their Victims.

Trafficking of human beings (THB) and child sexual abuse and exploitation (CSA/CSE) are two big problems in our society. Inadvertently, new information and communication technologies (ICTs) have provided a space for these problems to develop and take new forms, made worse by the lockdown caused by the COVID-19 pandemic. At the same time, technical and legal tools available to stakeholders that prevent, investigate, and assist victims - such as law enforcement agencies (LEAs), prosecutors, judges, and civil society organizations (CSOs) - fail to keep up with the pace at which criminals use new technologies to continue their abhorrent acts. The HEROES project's main objective is to use technology to improve the way in which help and support can be provided to victims of THB and CSA/CSE.

The partners include Inria and Universidade de Brasília - UnB, International Center for Missing and Exploited Children, Secretaria de Inteligencia Estratégica de Estado - Presidencia. INRIA Grant is 200 Keuros out of 3 Meuros.

For more information, see the HEROES Web Page.

The recruitee will mainly work with Francois Bremond, but beyond that, he/she will be able to collaborate with members of the STARS team. Support for traveling e.g. to conferences or other scientific meetings is provided.

Deadline for applications: Nov. 2022. Nevertheless, the application may be closed before the deadline, if a satisfying candidate is found.

Assignment

Tasks involved:

- Testing face detection algorithms, e.g., state-of-the-art deep learning techniques (e.g., age detection)
- Proposing extensions to such algorithms.
- Publications.

Main activities

The Inria STARS team is seeking a Post Doctoral researcher with a strong computer vision and mathematics background. We are especially interested in candidates with solid computer vision, deep learning, machine learning, and applied mathematics backgrounds.

Team

The STARS research team combines advanced theory with a cutting-edge practice focusing on cognitive vision systems.

Team website

https://team.inria.fr/stars/

Skills

Candidates must hold a master/Ph.D. in Computer Science or a closely related discipline. Candidates must also show evidence of research productivity (e.g. papers, patents, presentations, etc.) at the highest level.

The candidate must be grounded in computer vision basics and have solid mathematical and programming skills.
The candidate must be committed to scientific research and influential publications.

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
- Social security coverage
- Supplementary social protection

Remuneration

- Gross Salary: 2746 € per month
- Duration: 12 months
- Location: Inria Sophia Antipolis, France

General Information

- **Theme/Domain :** Vision, perception and multimedia interpretation
  Instrumentation et expérimentation (BAP C)
- **Town/city :** Sophia Antipolis
- **Inria Center :** Centre Inria d'Université Côte d'Azur
- **Starting date :** 2022-11-01
- **Duration of contract :** 1 year, 2 months
- **Deadline to apply :** 2022-10-04

Contacts

- **Inria Team :** STARS
- **Recruiter :**
  Brémond François / Francois.Bremond@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

You would like to push the boundaries of video understanding and report your success in high-level publications.

You are rigorous, serious, and reliable in your work.

In order to protect its scientific and technological assets, Inria is a restricted-access establishment. Consequently, it follows special regulations for welcoming any person who wishes to work with the institute. The final acceptance of each candidate thus depends on applying this security and defense procedure.

Instruction to apply

To apply, please send an application including

- Cover letter
- CV
- List of publications
- Contact information for at least two references who can provide recommendation letters upon request.

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.