2018-00589 - PostDoc / Computer Vision for autonomous driving

Contract type : Public service fixed-term contract
Renewable contract : Oui
Level of qualifications required : PhD or equivalent
Fonction : Post-Doctoral Research Visit
Level of experience : Recently graduated

Context
The job is located in center of Paris (France), at the Inria national research institute RITS team (Robotics and Intelligent Transportation System). The team has approx. 20 people working on Computer Vision/Planning/Control for intelligent transportation and autonomous vehicles (to test/validate our researches). The environment is nice and lively, with people from worldwide origins. Social skills will be appreciated, as collaborations with other researchers/PhDs is expected.

Assignment
The purpose of this position is to pursue our past work on vision in degraded conditions (bad weather, low lights, and occlusion, reflections, etc.).

Main activities
RITS team in Inria Paris is a research team working on autonomous driving. The group Computer Vision in the team is looking for a post-doc with excellent research knowledge and strong record in computer vision or machine learning.

The candidate must have an excellent research skills in computer vision and machine learning and very good records in one this field: computer vision, mobile robotics, or machine learning. The subject of the post-doc will be refined with the candidate but will be related to computer vision in degraded conditions including possible focus on glares, bad weather vision, strong occlusion, non-diffuse materials, etc. Several research lines are envisaged such as physic based models for computer vision, deep learning enforcing physic models for illumination, etc. Depending on a pending project, the work might be in collaboration with international research group and which would allow collaboration abroad (max. 3 months).

The candidate must have knowledge in one the following applications: object recognition, scene segmentation, 3D reconstruction, and knowledge of the following fields: computer vision, machine learning. She/He will have to publish to top tier conference(s) during the post-doctoral.

Skills
- Excellent knowledge of computer vision or deep learning for computer vision
- Strong publication records in computer vision (ICCV, CVPR, ECCV) or vision for mobile robotics (ICRA, IROS, IV).
- Good knowledge of either: object recognition, scene segmentation, 3D reconstruction, etc
- PhD in either Computer Vision or Machine Learning
- Good programming skills (Python and C++)
- Experience with real world mobile robotics is a plus

Benefits package
- Subsidised catering service
- Partially-reimbursed public transport
- Flexible working hours
- Sports facilities

General Information
- Theme/Domain : Robotics and Smart environments
  Scientific computing (BAP E)
- Town/city : Paris
- Inria Center : CRI de Paris
- Starting date : 2018-06-01
- Duration of contract : 12 months
- Deadline to apply : 2018-05-19

Contacts
- Inria Team : RITS
- Recruiter : De Charette De La Contrie Raoul / raoul.de-charette@inria.fr

About Inria
Inria, the French National Institute for computer science and applied mathematics, promotes “scientific excellence for technology transfer and society”. Graduates from the world’s top universities, Inria's 2700 employees rise to the challenges of digital sciences. With its open, agile model, Inria is able to explore original approaches with its partners in industry and academia and provide an efficient response to the multidisciplinary and application challenges of the digital transformation. Inria is the source of many innovations that add value and create jobs.

Conditions for application
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.

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.