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  
**Function**: Post-Doctoral Research Visit  
**Level of experience**: Recently graduated

**Context**

The job is located in the 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**: 2018-04-19

Contacts

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

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.