2018-00988 - 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 **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**  
Computer vision for scene understanding and autonomous driving.

**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 subject of the post-doc will be refined with the candidate but will be on scene understanding with computer vision with possible focus on bad weather vision, object recognition, strong occlusion, non-diffuse materials, etc. Several research lines are envisaged such as deep learning enforcing physical models for illumination, etc.

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  
- 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

**Note:** It is mandatory to have publication(s) in one of the following conferences: CVPR, ICCV, ACCV, ICML, NIPS, ECCV, 3DV, BMVC, ACPR or ICRA, IROS, ICAR, IV, RSS) or journals (IJCV, PAMI, ISPRS, Image Processing, Pattern Recognition, IJRR, IIT)

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

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**General Information**  
- **Theme/Domain:** Robotics and Smart environments  
- **Scientific computing (BAP E)**  
- **Town/city:** Paris  
- **Inria Center:** CRI de Paris  
- **Starting date:** 2018-11-01  
- **Duration of contract:** 12 months  
- **Deadline to apply:** 2018-09-30

**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 2,700 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.