2018-00682 - Perception / Computer Vision R&D engineer for autonomous driving applications

Renewable contract : Oui
Level of qualifications required : PhD or equivalent
Other valued qualifications : Computer vision or Robotics or signal processing
Function : Tempary Research Position

Context

RITS team in Inria Paris is a research team working on autonomous driving. The group Computer Vision in the team is looking for a research engineer with excellent programming skills and very good research knowledge to be part of the team.

The purpose of the position is to fill the gap between research works in the team and real experiments on our prototypes. The position will include research and engineering. R&D topics will cover traditional: sensors calibration (camera, single/multilayer laser sensors), obstacle/objects and road detection, multi-sensor data fusion...

Some of the developments will also be integrated in the framework of a national project in collaboration with Tier-1 Company. Thus, all developments will be integrated on real autonomous platforms belonging to RITS team and probably to partners of the projects.

Assignment

Assignments :
With the help of the other team members, the recruited person will be taken to work on the real autonomous platforms in Rocquencourt.

Collaboration :
The recruited person will be in connection with the national project's research and private partners but also with the research environment of RITS team.

Responsibilities :
The person recruited is responsible for the development of innovative solutions in image processing and perception and will take initiatives for the development and the implementation of the developed solutions on embedded architectures. He will also be in charge of documenting and very probably publishing some of the activities.

Main activities

Main activities (5 maximum) :

General Information

- Theme/Domain : Robotics and Smart environments
- Town/city : Rocquencourt
- Inria Center : CRI de Paris
- Starting date : 2018-06-01
- Duration of contract : 12 months
- Deadline to apply : 2018-05-10

Contacts

- Inria Team : RITS
- Recruiter : Nashashibi Fawzi / fawzi.nashashibi@inria.fr

The keys to success

The candidate will evolve in a dynamic research institute and a cosmopolite research team. He must feel comfortable in a research environment with applied activities and must be comfortable with scientific exchange and dissemination.

PhD thesis in the field of robotics or computer vision or real-time systems is a real asset or a Master degree (with real experience).

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.
- Propose scientific solutions for perception/detection modules
- Develop programs/applications/interfaces related to the perception modules
- Write documentation on the conducted work and possible dissemination by publishing related articles in conferences and journals
- Test, change up until validation on real mobile platforms
- Present the works' progress to the team members and project partners.

**Skills**

Technical skills and level required:

- Good / excellent knowledge of computer vision
- Good / excellent knowledge of deep learning
- C++, Python are required,
- Knowledge on RT-MAPS developing platform is a real advantage.
- Willing to implement and integrate on real platforms.

Driving license is appreciated but not mandatory.

Languages: English is a must, Good French is highly appreciated

Relational skills: open-minded and professionally cooperative and curious

**Benefits package**

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