2018-00283 - R&D Engineer WILLOW

**Type de contrat**: CDD de la fonction publique

**Contrat renouvelable**: Oui

**Niveau de diplôme exigé**: Bac + 5 ou équivalent

**Fonction**: Ingénieur scientifique contractuel

**Niveau d'expérience souhaité**: Jeune diplômé

---

**Contexte et atouts du poste**

Established in 1967, Inria is the only public research body fully dedicated to computational science. Combining computer sciences with mathematics, Inria's 3,500 researchers strive to invent the digital technologies of the future. Educated at leading international universities, they creatively integrate basic research with applied research and dedicate themselves to solving real problems, collaborating with the main players in public and private research in France and abroad and transferring results innovative companies. Inria researchers have published over 4,500 articles in 2013 and are behind over 270 active patents and 110 start-up companies. In 2013, Inria's budget was 235 million euros, 25% of which represented its own resources. The 180 project teams are distributed in eight research centers located throughout France.

The brand new Inria-Paris research center is located in the heart of Paris. Thanks to its top-quality researchers and numerous international guests, the Inria-Paris research center plays a leading role in international research, with a strong focus on networking and communication systems. The 41 research teams of the center are continuously pushing the boundaries in developing new concepts and techniques.

The successful candidate will be hosted within the research team Willow ([http://www.di.ens.fr/willow/](http://www.di.ens.fr/willow/)). Willow is a leading research team in computer vision, focusing on the representational aspects of visual object recognition and dynamic scene understanding. The research objective of the team is to develop geometric, physical, and statistical models for all components of the image interpretation process, including illumination, materials, objects, scenes, and human activities.

---

**Mission confiée**

The goal of the project is to construct new models and learning techniques to develop and learn new powerful representations for image and video understanding. Such representation should support and advance the tasks of visual object and action recognition. Specifically, the project will focus on recognizing objects and action in the object manipulation setup. Initially the manipulation will be performed and learned in the physical simulations settings and pre-recorded real videos of object manipulation by people. Later, depending on the availability of hardware, the representations should be transferred to real robot setup. The project will build on and will advance existing techniques of reinforcement learning, imitation learning and convolutional neural networks. The project may involve collaboration with PhD students and interns at the WILLOW team and should lead to a scientific publication.

---

**Principales activités**

Construct models and learn representations for understanding visual data

---

**Compétences**

The candidate should possess good mathematical background and programming skills

---

**Avantages sociaux**

- Subsidised catering service
- Partially-reimbursed public transport

---

**Rémunération**

- Duration: 12 months
- Targeted hiring date: 01/03/2018
- Location: Paris 12ème

---

**Informations générales**

- **Thème/Domaine**: Vision, perception et interprétation multimedia
- **Ville**: Paris
- **Centre Inria**: CRI de Paris
- **Date de prise de fonction souhaitée**: 01/03/2018
- **Durée de contrat**: 12 mois
- **Date limite pour postuler**: 31/03/2018

---

**Contacts**

- **Equipe Inria**: WILLOW
- **Recruteur**: Boumizy Sabrine / sabrine.boumizy@inria.fr

---

**L'essentiel pour réussir**

The candidate should have previous research experience in computer vision and machine learning. The candidate should have a Master degree or higher in engineering and should be fluent in spoken and written English

---

**Conditions pour postuler**

**Sécurité défense**

Ce poste est susceptible d’être affecté dans une zone à régime restrictif (ZRR), telle que définie dans le décret n°2011-1425 relatif à la protection du potentiel scientifique et technique de la nation (PPST). L’autorisation d’accès à une zone est délivrée par le chef d’établissement, après avis ministériel favorable, tel que défini dans l’arrêté du 03 juillet 2012, relatif à la PPST. Un avis ministériel défavorable pour un poste affecté dans une ZRR aurait pour conséquence l’annulation du recrutement.

**Politique de recrutement**

Dans le cadre de sa politique diversité, tous les postes Inria sont accessibles aux personnes en situation de handicap.

---

**Attention**: Les candidatures doivent être déposées en ligne sur le site Inria. Le traitement des candidatures adressées par d'autres canaux n'est pas garanti.
• Gross Salary per month according to experience