Principales activités

At the end of the project, this solution will be commercialized and used to map the network of gas pipes in France, before being used worldwide. Each partner is in charge of a different aspect of the problem: robotics, analysis of the inertial data, visualization, etc.

Inria is in charge of the wireless part. We will be equipping the robot with a wireless chip(set) in order to

- communicate with the robot as it moves about in the pipes while standing on the surface
- discover the relative localization of the robot w.r.t. a person on the surface.

In practice, Inria will be evaluating different wireless technologies, benchmarking around ranging accuracy and capabilities to communicate. We will start from off-the-shelf kits from different vendors to eventually build a custom board, benchmark it, and integrate it with the other partners of the project.

L’essentiel pour réussir

We are looking for an advanced engineer or a postdoctoral researcher ready to make a significant contribution to the field of wireless ranging and localization.

- The position is open to both Engineers (i.e. you have an Engineer and/or Masters degree) and Postdoctoral researchers (i.e. you have a PhD degree) in Computer Science, Telecommunications, Electrical Engineering or related field.

Conditions pour postuler

Send your CV and cover letter to thomas.watteyne@inria.fr with the subject “[GeoBot] application”. Don’t hesitate to ask clarifying questions before applying. Evaluation of applications will begin immediately and continue until the position is filled.

Candidates are encouraged to apply now.

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.

Informations générales

- Thème/Domaine : Réseaux et télécommunications
- Ville : Paris
- Centre Inria : CRI de Paris
- Date de prise de fonctions souhaitée : 2019-01-01
- Durée de contrat : 1 an, 9 mois
- Date limite pour postuler : 2018-12-31

Contacts

- Equipe Inria : EVA
- Recruteur : Watteyne Thomas / thomas.watteyne@inria.fr

A propos d’Inria

Inria, l'institut national de recherche dédié aux sciences du numérique, promeut l'excellence scientifique et le transfert pour avoir le plus grand impact. Il emploie 2400 personnes. Ses 200 équipes-projets agiles, en général communes avec des partenaires académiques, impliquent plus de 3000 scientifiques pour relever des défis des sciences informatiques et mathématiques, souvent à l'interface d'autres disciplines. Inria travaille avec de nombreuses entreprises et a accompagné la création de plus de 160 start-up. L'institut s'efforce ainsi de répondre aux enjeux de la transformation numérique de la science, de la société et de l'économie.

EVA (https://team.inria.fr/eva/) is a leading research team in low-power wireless communications. The research team is designing Tomorrow's Internet of (Important) Things. The team pushes the limits of low-power wireless mesh networking by applying them to critical applications such as industrial control loops, with harsh reliability, scalability, security and energy constraints. EVA co-chairs the IETF 6TiSCH standardization working group and co-leads Berkeley’s OpenWSN project. EVA is also heavily involved in real-world applications, and oversees over 1,000 sensors deployed on 3 continents for smart agriculture, smart city and environmental monitoring applications. The team is associated with Prof. Glaser's (UC Berkeley), Prof. Kerkez’ (U. Michigan) and Prof. Krishnamachari’s (USC) teams.

Le traitement des candidatures

Il est important de bien lire les conditions de candidature et de remplir les informations demandées. Les candidatures doivent être déposées en ligne sur le site Inria.

Date limite pour postuler : 2018-12-31
If you are so inclined, you will have ample opportunity to conduct cutting-edge research (and publish!) around the project, wireless ranging/localization, and IoT in general, from one of the most vibrant research teams in the field.

**Compétences**

**Strong “hard” skills**

- Very good programming skills and experience (C/Python/Java, etc.), including web development (server-side, JavaScript, PHP, html, etc.)
- General understanding of software quality and project management tools (Git, GitHub, TravisCI, Jenkins, etc.)
- Some embedded programming experience (micro-controllers such as MSP430, Cortex-M) ideally involving low-power wireless devices
- Ideally, experience with IoT and wireless (ranging) solutions, including IEEE802.15.4, Ultra Wide Band, ultrasound, ToA, etc.
- For postdocs, proven expertise in the general topic of wireless ranging and localization.

**Strong “soft” skills**

- We are looking for the “technical leader” type. If you have participated in open-source projects, have lead a software development team, tell us about it!
- Ideally, some open-source project experience, including source code and project management tools (Git, GitHub, Travis-CI, etc)

**Avantages sociaux**

Located at the heart of Europe, Paris is a unique place to work and live in. Inria offers a unique balance between working in a leading research center, and living in one of the most beautiful and bustling cities in the world. A real communication hub, Paris is a gateway to France and Western Europe, and working in the Inria-Paris research center is an asset to your career.

- Subsidised catering service
- Partially-reimbursed public transport

Speaking French is not a requirement, but a plus.

In the interests of protecting its scientific and technological assets, Inria is a restricted-access establishment. Consequently, it observes special regulations for welcoming foreign visitors from outside of the Schengen area. The final acceptance of each candidate thus depends on applying this security and defense procedure.