



Offre n°2024-07252

Vehicle engineering: Mechatronics / Robotics / Development

Type de contrat : Fixed-term contract

Contrat renouvelable : Oui

Niveau de diplôme exigé : Graduate degree or equivalent

Fonction : Temporary scientific engineer

Niveau d'expérience souhaité : Up to 3 years

Contexte et atouts du poste

The ASTRA Joint-team (research joint-team between INRIA and Valeo), which is mainly concerned with autonomous vehicles, is looking for a new engineer to manage its vehicles for up to 3 years (1 year renewable fixed-term contract). As part of the development of artificial intelligence and mobile robotics at Inria, we are looking for an engineer capable of managing our vehicle platforms, both on the hardware and the software sides. The candidate should have a very good knowledge of mobile robots (preferably with experience in automated vehicles), and be experienced in at least one of the following areas: low-level control (actuators, servomotors, etc.), electronics and electrical engineering, interfaces and sensors. A software knowledge of associated prototyping platforms (ROS, RtMAPS) would be a definite plus.

The objective is to maintain and improve the equipment of our prototype vehicles. Part of the work will consist of installing new sensors, solving unavoidable low-level problems (batteries, power supply, low-level control, actuators, CAN bus, etc.), and software maintenance of the equipment. The vehicles serve as scientific demonstration platforms for the team, and the candidate will therefore be required to collaborate with students and researchers in the preparation of experiments and the organization of official demos.

Location:

The candidate will be bi-located at the Inria Paris site (office) and the Inria Rocquencourt site (garage and platforms), with shared presence. Other travels will be possible within the framework of missions.

Duration and salary :

The contract will be 3 years, with 1 year renewable contracts. Salary will follow the official salary sheets.

Mission confiée

The candidate will be in charge of a fleet of automated vehicle robots, whose hardware and software must be organized and maintained in good working order. We expect a robotic profile with autonomy and a strong knowledge of the hardware and software operation of the vehicles. A knowledge of development is a significant plus and notions of algorithms (control, planning, etc.) would be ideal.

Principales activités

Here is a list of missions that can be entrusted to the candidate:

- Physical maintenance of vehicles (repairs, ordering new parts, etc.),
- Installation and management of sensors (do-it-yourself profile and ingenuity required),
- Installation and update of software components,
- Verification of the operation of the low-level controls,
- Code management for GIT demonstrations, continuous integration, unit tests, etc.
- Participation in the team's developments (knowledge of Python and C++).
- Participation in the management of the team's servers

Collaboration : In addition to working in the ASTRA team, the candidate will also collaborate with Inria's Experimentation and Development department (SED team), through seminars and exchanges of best practices.

Compétences

Expected profile:

- Driver license is mandatory for this position
- Excellent knowledge in Robotics / Mechatronics [experience required],
- Excellent knowledge of ROS and/or RtMAPS prototyping platforms [experience required],
- Ability to propose practical and feasible solutions,
- Do-it-yourselfer and ingenious profile,
- Knowledge in code management: GIT, continuous integration, unit testing, etc.
- Knowledge in programming (C/C++, Python),
- Optional: advanced development knowledge,
- Optional: knowledge of server architectures. Languages : French optional but very desirable. Good level of English for communication (international team). Additional skills:
- Strong ability to work in groups,
- autonomy [essential],
- motivation,
- strength of initiative.

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Avantages

- Subsidized meals
- Partial reimbursement of public transport costs
- Leave: 7 weeks of annual leave + 10 extra days off due to RTT (statutory reduction in working hours) + possibility of exceptional leave (sick children, moving home, etc.)
- Possibility of teleworking and flexible organization of working hours (after 12 months of employment)
- Professional equipment available (videoconferencing, loan of computer equipment, etc.)
- Social, cultural and sports events and activities
- Access to vocational training
- Social security coverage

Informations générales

- **Ville :** Paris
- **Centre Inria :** [Centre Inria de Paris](#)
- **Date de prise de fonction souhaitée :** 2024-04-01
- **Durée de contrat :** 2 years
- **Date limite pour postuler :** 2024-06-30

Contacts

- **Équipe Inria :** SED-PRO
- **Recruteur :**
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A propos d'Inria

Inria est l'institut national de recherche dédié aux sciences et technologies du numérique. Il emploie 2600 personnes. Ses 215 équipes-projets agiles, en général communes avec des partenaires académiques, impliquent plus de 3900 scientifiques pour relever les défis du numérique, souvent à l'interface d'autres disciplines. L'institut fait appel à de nombreux talents dans plus d'une quarantaine de métiers différents. 900 personnels d'appui à la recherche et à l'innovation contribuent à faire émerger et grandir des projets scientifiques ou entrepreneuriaux qui impactent le monde. Inria travaille avec de nombreuses entreprises et a accompagné la création de plus de 200 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.

L'essentiel pour réussir

The Driver license is mandatory for this position.

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.

Consignes 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.