



Offer #2024-08142

Software Engineer for “Software Defined Vehicle”

Contract type : Fixed-term contract

Renewable contract : Yes

Level of qualifications required : Graduate degree or equivalent

Fonction : Temporary scientific engineer

About the research centre or Inria department

The Inria center at Université Côte d'Azur includes 42 research teams and 9 support services. The center's staff (about 500 people) is made up of scientists of different nationalities, engineers, technicians and administrative staff. The teams are mainly located on the university campuses of Sophia Antipolis and Nice as well as Montpellier, in close collaboration with research and higher education laboratories and establishments (Université Côte d'Azur, CNRS, INRAE, INSERM ...), but also with the regional economic players.

With a presence in the fields of computational neuroscience and biology, data science and modeling, software engineering and certification, as well as collaborative robotics, the Inria Centre at Université Côte d'Azur is a major player in terms of scientific excellence through its results and collaborations at both European and international levels.

Context

Context

Currently, there is a significant transformation underway in the car manufacturing industry, driven by the concept of Software Defined Vehicles (SDVs). Software Defined Vehicles allow cars to be upgraded throughout their lifetimes via a centralized architecture, enabling updates and integration of new applications to enhance their functions. This represents the next revolution in the automotive industry, for which many manufacturers are preparing.

A primary objective of Software Defined Vehicles is to establish a flexible and scalable architecture, facilitating **faster development and integration of new features** over the vehicle's lifespan.

In this context, #HAL4SDV is an innovative collaborative European project, which is starting, bringing together 50 partners from industry and academia to establish a set of standards and new development practices aimed at **making SDV development more agile**.

The Kairos team, a joint team between Inria d'Université Côte d'Azur and i3S laboratory, is seeking a Software Engineer to contribute to this ambitious European project.

Assignment

As a Software Engineer on the Kairos team, you will assist in developing innovative design/coding environments to define the vehicle services/apps of tomorrow. The Kairos vision is that these design environments will leverage an abstraction of the service API and lifecycle to **provide feedback to developers and system architects regarding the functional and extra-functional impact of their services within the global architecture**. This feedback could be obtained through different technics spanning over testing, static analysis or simulation. This work will have real-world applications, as we collaborate closely with our European partners to enable more insightful development of SDVs.

Main activities

You will engineer the solutions proposed by the researchers of the Kairos team so that it integrates the various partners technologies and tools. It could for instance be extensions to the VS-Code IDE or more dedicated plugins.

Skills

Required skills

- Bachelor's degree in Computer Science, software engineering, embedded systems, or a related field.

- Open mindedness about the use of different languages and frameworks, proficiency in at least one classical programming languages (e.g., Typescript, Java, C++).
- Familiarity with classical development practices, including unit testing and CI/CD (Continuous Integration/Continuous Deployment).
- Strong ability to adapt to dynamic research environments and solve complex technical challenges.
- Interest in Language Engineering is a plus.

Benefits package

- 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
- Professional equipment available (videoconferencing, loan of computer equipment, etc.)
- Social, cultural and sports events and activities
- Access to vocational training
- Contribution to mutual insurance (subject to conditions)

Remuneration

From 2692 € gross monthly (according to degree and experience)

General Information

- **Theme/Domain** : Software engineering (BAP E)
- **Town/city** : Sophia Antipolis
- **Inria Center** : [Centre Inria d'Université Côte d'Azur](#)
- **Starting date** : 2025-01-01
- **Duration of contract** : 12 months
- **Deadline to apply** : 2024-12-31

Contacts

- **Inria Team** : [KAIROS](#)
- **Recruiter** :
Deantoni Julien / Julien.Deantoni@inria.fr

About Inria

Inria is the French national research institute dedicated to digital science and technology. It employs 2,600 people. Its 200 agile project teams, generally run jointly with academic partners, include more than 3,500 scientists and engineers working to meet the challenges of digital technology, often at the interface with other disciplines. The Institute also employs numerous talents in over forty different professions. 900 research support staff contribute to the preparation and development of scientific and entrepreneurial projects that have a worldwide impact.

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.

Instruction to apply

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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.