



## Research Engineer: call for application

### Software Engineer for Embedded Systems in Autonomous Vehicles

#### 1. Context and job description

Based on its long-time experience in the field of Intelligent Vehicles, the Heudiasyc laboratory (UMR CNRS 7253) based at the Université de Technologie de Compiègne is building today a strategic partnership with Renault within the joint laboratory SIVALab<sup>1</sup> to work on high integrity navigation systems for autonomous vehicles with a focus on perception and localization.

In that context, the goal of this 2-years (renewable) research engineer position is to participate to the software developments, hardware integration and demonstrator's set-up on autonomous vehicles facilities of the Heudiasyc laboratory within the fields of perception and localization for safe autonomous navigation.



One of the autonomous vehicles based on Renault Zoé cars and the SEVILLE test track

#### 2. Candidates' profile

Prospective candidates must have a background in one or several of the following research fields: Robotics, estimation, GNSS, artificial vision and machine learning with application to autonomous systems and ITS. Furthermore, they must possess:

- Strong skills in C/C++ and/or Python,
- Good practice of GIT, CMake and software project management,
- A good knowledge of ROS and ideally of databases technologies (SQLite, Spatialite),
- An experience in the development and the test of robotic software,
- Good communication skills in English to attend international meetings.

Scientific curiosity, large autonomy and ability to work independently are also expected. At least an engineering degree in computer science (or related fields) is required.

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<sup>1</sup> <http://blog.alliance-renault-nissan.com/node/3533>



### 3. Conditions

**Place:** Laboratoire Heudiasyc UMR CNRS 7253

Université de Technologie de Compiègne

Compiègne, web site: [www.hds.utc.fr](http://www.hds.utc.fr)

**Employer:** CNRS

**Duration:** 4 years

**Salary:** ~2100 €/month (after taxes) depending on the experience

**Application:** CV with publications record and motivation letter. Please, provide a link to the documents to download rather than attach them to your application email. The application email must be sent to the contacts provided below.

#### **Contacts**

Vincent Frémont, email: [vincent.fremont@hds.utc.fr](mailto:vincent.fremont@hds.utc.fr)

Stéphane Bonnet, email : [stephane.bonnet@hds.utc.fr](mailto:stephane.bonnet@hds.utc.fr)