

## **Software Engineer**

### JOB POSTING

#### Institute

Institut des Sciences de la Terre, CNRS, UMR 5275, CS40700, 38058 Grenoble Cedex 9  
<https://www.isterre.fr>

#### Employment Status

Contract: six month, eventually renewable  
Schedule: full time employment

#### Position Summary

The European project EPOS (European Plate Observing System) is a long-term plan to facilitate integrated use of data, data products, and facilities from distributed research infrastructures for solid Earth science in Europe. Within this framework, ISTerre is developing AVIOS web service (Ambient Vibration Integrated Online Service), aimed at offering an automatic and standardized processing of seismic ambient vibrations and delivering reliable shear-wave velocity profiles to the seismological community. World leader in seismic ambient vibration analysis, ISTerre has been developing and maintaining for more than 10 years a software package dedicated to such techniques (<http://www.geopsy.org>). AVIOS will be a web interface built upon Geopsy core libraries. The software engineer, in collaboration with geopsy core developer, will be in charge of the design and the implementation of the web user interface, the management of internal databases and integration with external databases (e.g. European Geotechnical Database).

#### Job Description

Development of AVIOS platform:

- Design and implementation of AVIOS web interface (account management, data collection, job control, distribution of results).
- Development of links to and from other related databases such as the European Geotechnical database proposed as another web-service in EPOS.
- Write user and technical documentation.
- Comply with programming standards, security and quality of development to ease future maintenance.
- Provide automatic testbenches.

Help development and maintenance of geopsy.org project:

- Improvement of geopsy web application.
- Bugs hunting and fixes
- Specific developments coordinated with researchers involved in the team.

#### Required Expertise

- Web development: HTML5, CSS3, Javascript, PHP, Mysql.
- Objected oriented programming and design patterns.
- Linux system administration and configuration.
- Management of an integrated development environment with version control (git) and inline documentation (doxygen).
- Teamwork skills

### Additional Skills

- Strong technical writing in English: user interface, technical documentation and code comments are necessarily in English
- Knowledge of C++ and Qt libraries.

### Educational Requirements

- L3 or M2 degree in computing science, or a equivalent degree in computer engineering
- Experience in an academic or other research organization is preferred

### Salary Range

The standard salary range is 1990 - 2417 Euros per month (net salary after deduction of healthcare, unemployment and pension charges), depending on the candidate's education and professional experience. Please contact the team for more information on the French salary and tax system. This salary may be negotiable beyond the maximum standard CNRS salary, in depending on the experience of the candidate.

### Working Languages

English and eventually French

### Application Process

Please send your CV and cover letter to Marc Wathelet at [marc.wathelet@univ-grenoble-alpes.fr](mailto:marc.wathelet@univ-grenoble-alpes.fr)