

Job vacancy notice

Open engineer position in GNSS data analysis

IGN-France

Geodetic department

The National Institute for Geographic and Forestry Information (IGN) is a governmental organization placed under the supervision of the ministries responsible for ecology and the forest, employing roughly 1.500 persons over the whole french territory.

At IGN, we aim at supplying society and authorities with reference geodetic and geographical data and services over France. Our major productions are freely available through the national geographic data portal. We devote our action to supporting public policies for environment, land use planning, sustainable cities, risk mitigation, agriculture, defense,...

In a growing number of areas, we are developing collaborative productions with local authorities and communities of public, private or citizen actors.

Our engineering school, ENSG-Géomatique, and its multidisciplinary research teams, give IGN a high-level innovation potential in multiple fields (geodesy, forest, photogrammetry, artificial intelligence, spatial analysis, 3D visualization...). IGN is for instance in charge of the determination of the International terrestrial reference frame (ITRF), in close cooperation with the Institut de physique du globe de Paris.

About this offer:

The division of operations and territories of IGN is in charge of producing authoritative data, making appropriate representations of this data, managing, disseminating and archiving it. This data covers geodetic information, remote sensing coverage of the territory and cartographic representations.

Within this division, the geodetic department (SGM) is responsible for designing a geodetic infrastructure consistent with international systems, and managing and disseminating the national geodetic, gravity and vertical reference frames.

The geodetic reference frame is monitored and disseminated through a collaborative permanent GNSS network : the French “Réseau GNSS Permanent” (RGP). This job offer relates to the maintenance of the computing processes underlying the RGP.

Your missions:

As an experienced developer of the SGM developing team, you will be in charge of organizing the code evolution of the RGP computing process. Your major goals will be first to improve the exploitation of GALILEO signals in the RGP computing strategy, and secondly, to mitigate software risk within the RGP computation process.

For this purpose, you will:

- develop GNSS high accuracy computation processes on the basis of existing scientific softwares (Bernese GNSS software, ESOC NAPEOS software, GRGS GINS software);

- monitor extensively technological developments and scientific activities in this domain;
- set up digital production lines on the basis of your software development.

You will work with a junior developer on these tasks. You are expected to have an expert point of view in your domain, to be proactive in proposing your ideas to the team and to contribute to working groups needing your experience.

According to your skills, you may be asked to contribute to other projects within the department.

Required qualifications:

You benefit from a solid education in geodesy at the Master's degree level. You master scientific GNSS processing with at least one software contributing to IGS analysis. An experience with Bernese software will be appreciated.

You master at least one procedural programming language (experience with FORTRAN appreciated) and have some practice in interpreted language programming (shell, Perl, Python).

You are fluent in scientific and technical english.

You justify a two years experience as a developer in this field.

You are proactive, autonomous, and like teamwork.

Come with us !

Conditions:

- 3 years fix term contract, wages according to your diploma and experience (gross annual 30k – 45k)
- Place : IGN, 73 avenue de Paris, Saint-Mandé, France
- Position taking : from September 2022

Application:

Please send curriculum and motivation letter to recrutement-mobilite@ign.fr, under reference VGL/DOT/SGM/EPG -IEG

More information:

Technical information: Olivier.Jamet@ign.fr, Bruno.Garayt@ign.fr

Administrative information: recrutement-mobilite@ign.fr