

# Software engineer M/F

#### Introduction

Recognized worldwide, Syntony GNSS is a Toulouse-based company with the FrenchTech label, focusing on technological innovation in the GNSS field.

Specialized in radionavigation and embedded systems, we are world leaders in our field.

Our simulators, receivers and indoor/outdoor location systems answer to the growing needs of the aeronautics and space industries, as well as those of the public transport sector, railways and mining or even the IoT field.

With a portfolio of prestigious customers (Airbus, OneWeb, Airbus Safran Launchers, Thales Alenia Space, Honeywell, Rockwell, the Stockholm, New York and Toronto subways, and many others), we are constantly innovating our solutions to anticipate their future needs, strengthen our leadership, and conquer new markets.

The heart of our activity is articulated around 3 fundamental pillars:

- Innovation: by conceiving tomorrow's products and tools that are matching with our customers' real needs
- Dynamism: focus on our strengths and talents to deliver high quality products and solutions
- Open-mindedness: we maintain a respectful relationship with our customers, partners, and employees, and promote Humanism and the richness of multiculturalism.

#### Context of the mission

SYNTONY develops GNSS positioning products and location solutions for confined environments.

We keep on innovating:

- Softspot: Innovative SDR multi-frequency GNSS receiver for applications requiring top-level performance in terms of accuracy, resilience to interferences and spoofing.
- Constellator: High-performance GNSS environment simulator to meet the challenges of New Space and emerging applications in transportation and autonomous vehicles.
- SubWAVE: Underground GPS coverage extension system, patented, unique in the world, aimed for public transportation, rail and mining sectors.

We're hiring new talents!

You have strong skills in embedded software development, you are passionate about cuttingedge technologies and technical challenges, and have a good scientific culture and intellectual curiosity?

Then apply to this position!



#### Goals

Working in the simulators' section of the R&D department, you will be involved in the design and realization of Constellator and SubWAVE products upgrades. Your mission is to:

- Collect and analyze products evolution requirements: addition of new positioning signals, new disturbance models (ionosphere, orbit, etc.), new simulation capacities (multiple trajectories, jamming/spoofing signals, multipaths...), new communication and control interfaces, intersystem interfaces, etc.
- Design technical solutions to meet these needs
- Implement solutions and unit-test them
- Participate in product integration and validation phases, on the physical platform, in the laboratory, with reference receiver or other measuring instruments (spectrum analyzer, etc.).
- Keep monitoring the technological developments as part of a continuous improvement process.

### Experience

Graduate of an engineering school or doctoral degree, you ideally have 3 to 5 years' experience in developing projects/products involving complex architectures.

Experience in the space industry is a plus.

#### Technical skills

Programming language : C, C++, Python

• Operating system : Linux

Version control: Git, SVN

Methodology: continuous integration, UML, quality repository: ISO 9001:2015

- Knowledge of GNSS preferred
- Fluent English

## Soft skills

- With a strong appetence for the technological challenges, you know how to share your passion
- You can argue and convince in a common goal: the customer's satisfaction and the success of the product
- Good listening and open-mindedness characterize you