

## Front-End Software Developer

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### Role summary

As a technical engineer (software) or an engineer (software) in the SRC section of the BE-CO group, you will join the team in charge of developing the FESA framework and the FESA classes for OASIS and the generic CO hardware modules. You will participate in the development sprints performing the analysis, design, implementation and test of new features in the aforementioned domains.

### Introduction

The SRC section of the BE-CO group provides software tools (FESA, SILECS), communication infrastructure (CMW), generic classes (CG, OASIS) and the timing infrastructure. The section is currently in need of front-end software developers to keep pace with the required evolutions of our frameworks, our generic FESA classes and to improve the automated testing and diagnostics of the timing system.

### Functions

As a member of the Software for Real-time & Communication section, you will:

- Work on the FESA C++ framework and tools;
- Work on the FESA classes that control hardware modules such as digitisers (OASIS) and other CO-made electronic boards (CG classes);
- Develop the low-level part of the timing diagnostic service;
- Develop automated validation tests for the CO electronic modules.

### Experience and Competencies

The technical competencies required for this post are:

- Excellent knowledge in modern software techniques and OO principles;
- Good knowledge of the C++ language, the C++ Standard library and Boost;
- Good knowledge of Linux environment and compilation tool chain (GCC);
- Strong interest in low-level userland software controlling hardware modules.

The following are considered as strong assets but not mandatory:

- Knowledge of the Python language and/or the XML technologies such as Schema and XSLT.

The behavioral competencies required for this post are:

- Achieving results: Drives work / projects along and sees them through to their conclusion; is able to set priorities and plan tasks with results in mind.
- Solving problems: Addresses complex problems by breaking them down into manageable components.
- Communicating effectively: Is able to discuss effectively with collaborators from the hardware design and operations teams.
- Working in teams: Works well in groups and readily fits into a team; participates fully and takes an active role in team activities.

The language competencies required for this post are:

- French and English oral comprehension

Duration of the detachment: minimum 12 months, maximum 24 months