

NEW  
POSITION

imperix

## C/C++ DEVELOPMENT ENGINEER

**Contract type** Long-term contract (CDI)

**From** Immediately

### WHO WE ARE

Imperix is a Swiss company commercializing prototyping equipment for power electronics, electric drives, smart grids and related topics. Its products are designed to accelerate the implementation of laboratory-scale power converters and facilitate the derivation of high-quality experimental results. Typical customers are world-class universities and industries that have a strong focus on research and intend to validate power converter control techniques.

Founded in 2013, imperix is a young and dynamic company of about 10 people. It currently has its premises inside the "Espace Creation" building, in the lively city center of Sion.

### WHAT WE DO

The company's flagship product is the B-Box, a digital controller for power electronic converters, built around the Xilinx Zynq System-on-Chip which contain a dual-core ARM processor. On one of those core runs a proprietary real-time OS, which performs closed-loop control task in the range of 10 to 200 kHz. The second core is an embedded Linux distribution that takes care of the monitoring, datalogging as well as communication with the host computer.

### YOUR JOB

You will have the opportunity to work on various aspect of the B-Box programming and *real-time* remote control, ranging from the support of code generation from graphical models (Simulink, PLECS) to data logging and post-processing, or the continuous development and optimization of our embedded real-time OS (*BBOS*) and proprietary communication protocol (*RealSync*). You may also work on microcontrollers. If interested, you may also work on FPGA firmware (VHDL).

As part of our software team, your responsibilities and main duties will be:

- Contribute to various software developments
- Progressively take responsibilities in specifications / architecture design
- Conduct testing together with application engineers
- Document and report about the achieved work
- Contribute to customer support and/or technical sales

## WHAT WE EXPECT

**Education** Bachelor or Master degree in electrical engineering or computer science.

**Seniority** Junior to Mid-senior. A previous experience of software development is desired.

**Language** Good written communication skills in English. Ease with French (spoken and written). As of today, the main working language at imperix is (still) French.

Experience with the following tools are considered a plus:

- MATLAB Simulink, Plexim PLECS
- Communication protocol (TCP/IP, UART, SPI, JTAG,...)
- Scripting, compilation tools, gcc, make
- Qt API
- Linux
- FPGA, VHDL
- PHP/MySQL or other web technologies

## THIS POSITION WILL SUIT YOU IF

- You are seeking to work in a dynamic, fast-paced environment
- You are eager to learn about power electronics and facets of software engineering you are less (or not) familiar with
- You are self-motivated and capable to work both individually as well as part of a team
- You are a down-the-earth person with a natural focus on bringing effective solutions.
- You are looking for a position giving place and granting value to your initiatives
- You appreciate a young and friendly environment that is also professional and result-oriented
- You need a flexible schedule and/or the ability to work remotely

If you feel like working with us, please send us your CV along with a cover letter explaining your motivations and what you would bring to the team. Email correspondence should be addressed to [jobs@imperix.ch](mailto:jobs@imperix.ch). We reserve the right to maintain correspondence only with profiles that reasonably correspond to the position.

**Deadline for application : Sep. 30th 2019**