Title: Python Developer Intern

Location: Geneva, Switzerland (work location in Prévessin-Moëns, France), On-Site

Duration: Minimum 8 weeks

Start Date: Ideally 1. July 2024

Company & team description:

CERN, the European Organization for Nuclear Research, is one of the world's largest and most respected centers for scientific research. Located on the Franco-Swiss border near Geneva, it operates a complex of advanced particle accelerators, including the Large Hadron Collider (LHC). As a hub for some of the most groundbreaking physics experiments, CERN offers a unique environment where scientists and engineers collaborate to delve into the fundamental secrets of the universe.

SY-EPC-CCS section is responsible for developing and maintaining software for power converters, which are essential for the magnets in the accelerators and experiments. The hiring team is responsible for the industrial controls, which includes PLCs, hardware, software, fieldbuses, HMIs, and SCADA development.

Project Overview:

During this internship, your main task will involve developing a Python-based tool. This tool will be used for performing commissioning tests on the accelerator complex's control systems, using Pytest scripts. These tests are crucial for ensuring that the control systems operate properly.

It's important that you bring some prior experience with Python projects to the role. If you also have experience with Pytest, Git, Gitlab, or Siemens S7-1500 PLCs, that will be considered a plus.

As the primary developer of this tool, you will work closely with the team member in charge of PLC testing. You'll have the chance to propose ideas and help shape the final design of the tool. This internship is not only an opportunity to contribute to work at CERN, but it will also be a valuable addition to your resume.

Responsibilities:

- Be the main developer of the tool.
- Work closely with automation engineers, especially the CI experts in the team.
- Participate in weekly meetings regarding the progress in the project.

Qualifications:

- Some previous experience from Python projects
- It would be beneficial to know at least something about industrial automation, though this is not mandatory.

Benefits:

This is a great opportunity to get an idea what it is like to work at an international organization like CERN and network with industry experts. Depending on the schedule and the situation in the accelerator complex, you might get the chance to visit some of the experiments, where you will get to see some of the most sophisticated machines/instruments in the world.