Software Engineer
*at **Extreme Light Infrastructure –Nuclear Physics (ELI-NP)** Research Facility,*
***Research Activity 1** – High-Power Laser Systems*

Position Description and Candidate's Profile

Scope of Work

The Software Engineer will work in the "High-Power Laser Systems" team (Research Activity 1 team, http://www.eli-np.ro/research-activities-ra1.php) and will collaborate with the rest of the ELI-NP technical and experimental teams.

During the implementation phase, the Software engineer will participate in the activities of monitoring the installation and commissioning the HPLS* and LBTS**, and will work on software projects that will ease the operation of the equipment.

During the operation phase, the Software engineer will ensure the smooth operation of the HPLS and LBTS and will continuously work on software upgrades of the systems.

** HPLS: High-Power Laser System delivered by Thales*

*** LBTS: Laser Beam Transport System*

Main responsibilities

In the implementation phase, the Software Engineer will:

- Gather the knowledge and experience necessary to ensure the operation of the HPLS and LBTS and of the related equipment. In this context, he/she will benefit from training provided by the suppliers of the equipment regarding the assembling, testing and commissioning of the equipment.
- Ensure the best and efficient collaboration and dialogue between the RA1 team and the suppliers of the respective equipment and various services.
- Participate (leading position depending on experience) in the software projects conducted in RA1 that are related to the integration of the laser systems in the ELI-NP facility.

In the operational phase, the Software Engineer will:

- Provide technical support for the operation and maintenance of the HPLS and LBTS.
- Provide technical support for the ELI-NP experimental teams.
- Participate in software projects, parts of the maintenance and upgrades of the systems

Main tasks

- Gather and assimilate the documentation concerning the HPLS and LBTS software systems, in particular the HPLS control system.
- Participate in the activities ensuring technical support for the installation and commissioning of the HPLS, with a special care on the HPLS and LBTS control system software.
- Continue or initiate the development of specific software applications such as

    - "Equipment and Wiring database" and associated web-clients
    - Client-Server applications, based on TANGO (http://www.tango-controls.org/), for the integration of various laser diagnostics instruments (e.g. CCD cameras, spectrometers, energy-meters, oscilloscopes, electronic delay generators, etc.)
- Promote a harmonious collaboration framework.

Competencies and experience

- Bachelor's or Master's degree in Computer Sciences/Control systems or related field
- Proficient in Java
- Good knowledge of at least one the following programming language: C++, Python
- Relevant experience in at least one of the two topics:
    - Database design, implementation and maintenance: MySQL and/or SQL
    - Software projects: projects including control engineering, and client-server architecture
- Being able to set priorities and plan tasks with results in mind
- Adapting quickly and resourcefully to shifting priorities and requirements.
- Fluency in English;
- Proven teamwork experience and efficient communication and collaboration skills
- Previous experience in TANGO software is a plus

Conditions of employment

- Full-time position, based in Bucharest–Magurele, Romania;
- Included: private medical coverage, paid annual leave
- Motivating salary, at European level, based on qualifications and experience
- Professional, multicultural and interdisciplinary work environment

Applications

- Applications shall be accompanied by the documents requested in the Rules of Selection for this position.
- Applications shall be sent to the Human Resources Department at human.resources@eli-np.ro.