ELI-HU Non-Profit Limited Liability Company is announcing a job opening for a

Data Scientist

Background information

The Extreme Light Infrastructure (ELI) is the world's most advanced international laser research infrastructure. It will provide the scientific community with access to a new generation of laser technologies delivering sources of ultraintense, high-energy particle beams and ultrabright radiation in the femtosecond and attosecond timescales for multidisciplinary applications for a wide range of disciplines including materials sciences, engineering, medicine, biology, chemistry, and astrophysics. The ELI Facilities are being commissioned and entering initial operations. Teams are working on-site to ensure that data acquisition and storage solutions are in place to fulfil initial requirements. When fully operational, ELI is expected to serve hundreds of scientific users per year generating an estimated 5 Petabytes of scientific data annually. ELI is committed to provide its users with state-of-the-art tools, methods and services for the acquisition, analysis, curation, and preservation of data derived from experiments, according to the FAIR principles (Findable, Accessible, Interoperable, and Re-usable). These efforts are taking place within the framework and with the support of PaNOSC (Photon and Neutron Open Science Cloud), a project financed by the European Commission bringing together six major world-class European research infrastructure facilities, including ELI. PaNOSC aims to make scientific data produced at Europe's major photon and neutron sources fully compatible with the FAIR principles in terms of data policy and services to users, as well as to contribute to the implementation of the European Open Science Cloud.

ELI Attosecond Light Pulse Source (ELI-ALPS) Research Centre located in Szeged, Hungary, is devoted to the study of electron dynamics on the femto-, attosecond scale in atoms, molecules, plasmas and biological samples.
The primary mission of ELI-ALPS is to make a wide range of ultrafast light sources accessible to user groups from the international scientific community, with special consideration to coherent extreme-ultraviolet (XUV) and x-ray radiations, and to attosecond pulses. The preparation and construction of ELI-ALPS has been coordinated by the ELI-HU Research and Development Non-Profit Ltd. ELI-ALPS will be operated under ELI ERIC, an international organisation in the process of being established. The ELI Facilities operated under ELI ERIC will share a common data policy.

Our new colleague in the **Data Scientist** position will be responsible for providing software engineering and information technology support related to experiment data handling for the entire data lifecycle, such as capturing and collecting, storing, maintaining, processing, evaluating and remotely accessing experiment data and metadata. The position is related to the PaNOSC project (www.panosc.eu) and involves participation in the project's Data Catalogue Services work package (WP3).

Duties and Responsibilities

- Participate in the design and development of data acquisition and data capturing components for various sensors, detectors and measuring devices
- Design, develop and maintain data management components and utilities related to experiment data and metadata
- Participate in the design and development of the data management infrastructure of ELI-ALPS
- Participate in and contribute to the Data Catalogue Services work package (WP3) of the PaNOSC project

Education and Experience

- MSc in Computer Science, Software Engineering or similar STEM field
- Proven track record of programming in at least two of the following languages: Python, R, C++, C#, Java
- Experience in using scientific software libraries
- Experience in the development of complex software solutions

- Experience in working with software development environments and tools (e.g. IDEs, team collaboration, version management)

Skills and Abilities

- Excellent software engineering and programming skills
- Interests to natural sciences, especially physics
- Ability to analyse data/information and develop/deliver findings and recommendations
- Good oral and written communication skills in English

Employment conditions

- Start of employment: as soon as possible
- Full-time employment contract for definite term till 2022.11.30. (renewable)
- Competitive benefit package
- Job location in Szeged
- The position will involve occasional travels within Hungary and abroad

If you are interested in the position, please upload your CV and motivation letter to our Career Site at https://www.eli-alps.hu/en/Career.