



SESAME

Synchrotron-light for Experimental Science and Applications in the Middle East

Notice No:	TS/25/01
Position:	Control Software Engineer, (Grade P0-P1, will be defined according to the qualifications)
Sector:	Technical
Duty Station:	Allan, Jordan
Issue Date:	27 May 2025
Type/Duration of Appointment:	3 years, renewable (first 12 months are proportion period).
Start Date:	As soon as possible
Application Deadline:	August 27, 2025 or until a suitable candidate is found
Organization Setting	
<p>SESAME is the first synchrotron light source in the Middle East and neighboring countries. It is located in Allan (Jordan) and is an associate member of the League of European Accelerator-based Photon Sources (LEAPS). Currently, five beamlines are in operation, serving users: the BM02-IR (Infrared Spectro-microscopy) beamline, the BM08-XAFS/XRF (X-ray Absorption Fine Structure/X-ray Fluorescence) spectroscopy beamline, the ID09-MS/XPD (Materials Science/X-ray Powder Diffraction) beamline, the soft X-ray ID11L-HESEB (Helmholtz-SESAME Beamline), and the ID10-BEATS (BEAmline for Tomography at SESAME). These five beamlines, part of the eight planned for Phase I, enable world-class research across a broad range of scientific fields.</p>	
Assignment	
<p>Under the overall authority of the Technical Director, and the specific supervision of the Supervisor of Controls Team, the main responsibilities of the incumbent will be to:</p> <ul style="list-style-type: none">• Participate in the planning and preparation of projects involving control systems.• Design and implement new control systems and user interfaces• Design, develop, code, test, and validate system software in a Linux OS environment.• Collaborate closely with machine and beamline project teams to define requirements and specifications for new modules on top of current running control systems.• Report on progress and document work undertaken across all assigned tasks.• Commission new modules on top of control systems.• Provide operational support for running control systems, including responding to faults and handling requests for development or enhancements• Quickly understand and troubleshoot installed control system issues to minimize Mean Timer to Repair (MTTR).	
Education and Experience	
<ul style="list-style-type: none">• B.Sc. degree in Control, Software, Electrical, Electronic, Computer Engineering, Computer Science, or any other related field.• Excellent knowledge and experience with Linux OS (RHEL based is preferred).	

- Solid programming skills in C, C++, and Python.
- Good understanding of computer networking and TCP/IP protocols.
- Hands-on experience with Git version control.
- 2 to 4 years of proven experience in software engineering.
- Experience working in environments that require multitasking.

Additional preferable qualifications:

- Experience with EPICS and Qt.
- knowledge in Docker containers and Kubernetes.
- Familiarity with artificial intelligence (AI) and machine learning (ML), concepts and tools (e.g., scikit-learn/Keras/pytorch).
- Experience in motion control, computer vision, and instrument control.
- Knowledge of embedded systems and FPGA programming.
- Prior experience working in a scientific research laboratory or synchrotron facility.

Knowledge, Skills and Abilities

- Excellent communication and writing skills.
- Ability to read and interpret manuals, schematics, and data sheets for devices and components.
- Capable of working effectively in a team, as well as independently with minimal supervision.
- Work for extra hours and during the weekends and vacations if urgently needed (i.e., in case of machine and beamlines' needs, a down service, etc.).
- Strong organizational skills.
- Eagerness to learn and support new systems and applications.

Employment Conditions

- Appointment is made by SESAME Director. The Control Software Engineer will be hired at the Grade P0-P1, and the Step will be compatible with his/her experience.
- The work location is in Allan, Jordan.
- The position requires full time commitment.
- In addition to the basic salary the incumbent is entitled to other allowances (as stated in SESAME provisional Staff Rules and SESAME Staff Regulations).
- SESAME is an equal opportunity employer.

How to apply

A detailed C.V. in English and a cover letter should be addressed to the Administrative Director by filling the Online Submission Form on the announcement page.

In your cover letter, please be sure to address the following points:

- Briefly introduce yourself.
- Your field of experience.
- Your proficiency and experience with Linux operating systems.
- Your proficiency in C, C++ and python programming.
- Any experience you have with other programming languages

For further Information

Consult the SESAME web site: www.sesame.org.jo