

### Director

# of IT4Innovations National Supercomputing Center

VSB - Technical University of Ostrava announces a selection procedure for a post of

## **Research Assistant**

for Quantum Computing Lab
The position is suitable for both women and men.

IT4Innovations National Supercomputing Center is a leading research, development, and innovation centre active in the fields of High-Performance Computing (HPC), Data Analytics (HPDA), Artificial Intelligence (AI), and Quantum Computing (QC) and their applications. We have strong international links and employ more than 200 scientific, technical, and administrative staff. At present, IT4Innovations is running two supercomputers: Karolina (15.7 PFlop/s, installed in the summer of 2021), Barbora (849 TFlop/s, installed in the autumn of 2019), and is a member of the consortium operating LUMI, one of Europe's most powerful supercomputers. IT4Innovations also operates the first Czech quantum computer named VLQ. For more details, see www.it4i.eu. https://www.it4i.cz/

# **Activity description:**

- development of quantum algorithms in line with the needs of IT4Innovations projects,
- development of software tools for quantum error correction,
- implementation of developed quantum algorithms on quantum simulators and computers,
- participation in national or international research projects,
- publishing activities, including presentation of results at conferences.

Full time equivalent: 0,5 - 1,0

Type of job contract:fixed-term employmentExpected start of employment:5. 1. 2026 or as agreed

#### **Requirements:**

- university degree in IT or computational mathematics, minimum required degree of MSc at the time of commencement,
- experience with quantum register programming,
- minimum basic knowledge of C/C++ and Python languages,
- the following experience is an advantage: experience with the Qiskit framework, knowledge of quantum error correction, involvement in the development of practical use cases,
- willingness to continue learning and work in a team,
- working knowledge of English.

### We offer:

- work in a friendly team fostering open and efficient communication,
- · flexible working hours and home office,
- salary evaluation according project conditions and candidate's experience,
- possibility of further education,

- 6 weeks of holidays,
- university kindergarten,
- contribution option to pension plan,
- company catering in the canteen,
- MultiSport card,
- other employee benefits according to the employer's offer (shopping, R&R).

Your personal data will be processed to the extent necessary for the implementation of the selection procedure in accordance with EU Regulation 2016/679.

https://www.vsb.cz/export/sites/vsb/en/.content/files/Informace-pro-uchazece-o-zamestnani-AJ.pdf

The application form substantiated with a letter of motivation and CV should be sent electronically to the email address: <a href="mailto:petra.brozova@vsb.cz">petra.brozova@vsb.cz</a> until 11. 12. 2025.

In the subject of the email please state "Open Call for the position of the Research Assistant for Quantum Computing Lab".