Research associate quantum computing (m/f/o)

Quantum computing is the next big thing in computer science. While physicists and engineers are constructing quantum computers, the corresponding big challenge is quantum computing software.

LMU, Munich's elite university, has founded QAR-Lab as a scientific spearhead in this field. We are driving breakthrough projects to create efficient algorithms and software platforms that will enable quantum computers to deliver to their promises. Our approach is hands-on: We have access to several existing QC platforms such as IBM's System One, Fujitsu's DAU, D-Wave Systems' Advantage. We want to make QC reality!

The QAR-Lab is involved in several initiatives and research projects of the Munich Quantum Valley (MQV), for which we are looking for research associates.

Absolutely essential is to bring enthusiasm to lead the mentioned projects to success. We are therefore looking for applicants who are passionate about quantum computing and want to make their contribution to the future of computer science

Your tasks include:

- Research in the field of quantum computing
- Collaborative research projects
- Finding and improving algorithms for QC, particularly applications for optimization and artificial intelligence
- Evaluation of existing QC and QAI algorithms
- Defining and developing software platforms for NISQ computers
- Assisting teaching and overseeing bachelor and master students

What you can expect from us:

- Responsible activity in an international research environment
- Opportunity to do a doctorate at a renowned university
- Workplace in central, attractive location near the English Garden in Munich
- Flexible weekly working hours
- Pay grouping in TV-L in grade E13
- Capital-forming payments
- Support offers through the LMU family service
- Rebates for fitness and sports offers

Our Requirements:

- First rate master's degree in computer science or a related discipline
- Curiosity, creativity and enthusiasm for research and new technologies
- Profound knowledge and experience in programming, Python as a plus
- Experience in quantum computing advantageous (e.g. with IBM Qiskit, D-Wave Ocean and possibly Xanadu Pennylane)
- Expertise in optimization and machine learning advantageous
- Well-structured way of working, project experience as a plus
- Ability to work in a highly motivated team
- Communication skills, working knowledge of English and German is a must

The positions are temporary according to the project duration, with possibilities for extension. The place of work is in Munich. Part-time employment is generally possible.

Severely disabled applicants will be given preference if their suitability is otherwise essentially equal. Applications from women are welcome.

We will be happy to answer any questions you may have!

Application address

Do you want to become part of our team? We look forward to receiving your detailed application including cover letter, resume and references. Please send it preferably in one document (max. 5 MB) by e-mail to: jobs-qc@mobile.ifi.lmu.de

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