



The chair for Communication Systems and Systems Programming at Ludwig-Maximilian-University (LMU) Munich is looking for a

PhD Candidate / Research Assistant in Quantum and High Performance Computing (100% TV-L E13)

for research in the context of the Munich Quantum Valley project.

Tasks

- Innovative research in the areas of **high-level quantum programming** approaches, **compilers and optimizers for quantum gate circuits**, **offloading to quantum processing units (QPUs)** using **hybrid programming techniques**, **tool support for hybrid (classical/quantum) application development**, e.g., **characterization of acceleration potential** in existing applications.
- Contribute to national and international events (e.g., project meetings, scientific conferences).
- Interaction with and tutoring of graduate and undergraduate students at LMU Munich in lectures and seminars, and the supervision of master and bachelor theses.

Requirements

- Master's degree in Computer Science or a closely related area (e.g. Applied Mathematics, Bioinformatics, etc.)
- Demonstrated in-depth skills and knowledge in one or more topics of the "Systems" area of Computer Science, such as **Computer Architecture, Communication Systems, Operating Systems, Security, Programming Systems**.
- Prior experience in the areas of High Performance Computing and Quantum Computing is desirable.

We offer a position in a dynamic and competent team that is internationally connected and has access to computing resources of the highest performance category. The opening is for a full-time (100%) position with a duration that is linked to project funding (initially limited to 3 years, with the possibility of an extension). Remuneration is according to the German public-service salary level TV-L E13 (100%).

For further information, please feel free to contact Dr. Karl Furlinger at Tel. +49-(0)89-2180-9172 or Karl.Fuerlinger@nm.ifi.lmu.de.

Please send your postal application using the keyword **"QCHPC"** including a CV and a copy of your Bachelor and/or Master certificates to

Prof. Dr. Dieter Kranzlmüller
LMU München, Institut für Informatik
Oettingenstr. 67.
D-80538 Munich, Germany

Alternatively, an application via email should be sent to jobs@nm.ifi.lmu.de as a **single PDF file**.

The application Deadline is October 31, 2021