Petr Ivashkov

ivashkov.peter@gmail.com Petr Ivashkov petr-ivashkov petr-ivashkov

Education

ETH Zurich — **Sep 2023 – Sep 2025**
M.Sc. Quantum Engineering, GPA: 5.8 / 6.0[1] — Zurich, Switzerland
Focus: Quantum information and machine learning

Technical University of Munich — **Oct 2020 – Aug 2023**
B.Sc. Physics, GPA: 1.3 / 1.0[2] (Top 2%) — Munich, Germany

Research experience

Harvard University — **Feb 2025 – Ongoing**
Master's thesis under Prof. Susanne Yelin. — Remote

University of Zurich — **Mar 2024 – Nov 2024**
Collaboration with Prof. Guglielmo Mazzola. — Zurich, Switzerland

Centre for Quantum Technologies — **Jun 2024 – Sep 2024**
Visiting scholar under Prof. Patrick Rebentrost. — Singapore, Singapore

IBM Quantum — **Sep 2022 – Dec 2023**
Collaboration with Derek Wang, Alireza Seif, Prof. Liang Jiang. — Remote

Walther-Meissner-Institute — **May 2023 – July 2023**
Bachelor's thesis under Prof. Stefan Filipp. — Munich, Germany

Ludwig-Maximilians-University Munich — **Jun 2022 – Mar 2023**
Research assistant under Prof. Claudia Linnhoff-Popien. — Munich, Germany

Publications and preprints

[*] Denotes co-first authorship

[1] Johannes Christmann*, **Petr Ivashkov***, Mattia Chiurco, and Guglielmo Mazzola. From quantum-enhanced to quantum-inspired monte carlo. *Physical Review A*, 111(4):042615, 2025.

[2] **Petr Ivashkov**, Po-Wei Huang, Kelvin Koor, Lirandë Pira, and Patrick Rebentrost. Qkan: Quantum kolmogorov-arnold networks. *arXiv:2410.04435*, 2024.

[3] **Petr Ivashkov**, Gideon Uchehara, Liang Jiang, Derek S Wang, and Alireza Seif. High-fidelity, multiqubit generalized measurements with dynamic circuits. *PRX Quantum*, 5(3):030315, 2024.

Skills

Languages: Python, C++ (basic), x86 Assembly
Scientific computing: NumPy, SciPy, Wolfram Mathematica (basic), Tensor Networks, Slurm
Data analysis: Pandas, SQL, Matplotlib
Machine learning: Keras, scikit-learn
Other: Git, LaTeX, Inkscape, Qiskit

Spoken languages: English (C2), German (C1), Russian (native)

References are available upon request.

[1] Swiss grading scale ranges from 6.0 (excellent) to 4.0 (pass) to 1.0 (lowest). A higher grade is better.
[2] German grading scale ranges from 1.0 (excellent) to 4.0 (pass) to 5.0 (lowest). A lower grade is better.