Thomas Mueller

Zurich, Switzerland

thomas.mueller@fakeemail.com | +41 76 123 45 67 | LinkedIn | GitHub

Education

ETH Zurich

Doctor of Philosophy in Quantum Computing

Sep 2017 – Aug 2021 | Zurich, Switzerland

GPA: 6.0/6.0

Activities: Quantum Computing Lab Researcher, Physics Olympiad Coach, Graduate Teaching Assistant

Relevant Research: Quantum Algorithms, Quantum Error Correction, Quantum Machine Learning, Quantum Cryptography

Master's Degree: M.Sc. in Physics, ETH Zurich, Grade: 5.9/6.0

Work Experience

Quantum Software Engineer | IBM Quantum | Sep 2021 - Present | Zurich, Switzerland

- Developed quantum algorithms for optimization problems, achieving quadratic speedup over classical methods.
- Created software frameworks for quantum circuit simulation and visualization using Python and Qiskit.
- Collaborated with hardware engineers to optimize algorithms for NISQ-era quantum processors.
- Published 7 research papers in top-tier journals on quantum machine learning applications.

Skills

Quantum Computing: Quantum Algorithms, Quantum Circuit Design, Quantum Error Correction, Quantum Machine Learning

Programming: Python, C++, Julia, Q#, Qiskit, Cirq, PennyLane, PyQuil

Mathematics: Linear Algebra, Complex Analysis, Probability Theory, Group Theory, Tensor Calculus

Classical Computing: High-Performance Computing, Parallel Programming, GPU

Acceleration

Software Engineering: Git, Docker, CI/CD, Test-Driven Development

Data Analysis: NumPy, SciPy, Pandas, Matplotlib, Jupyter

Other: Scientific Writing, Technical Presentations, Research Methodology, Patent Development

Certificates

IBM Certified Associate Developer - Quantum Computation using Qiskit

Microsoft Certified: Azure Quantum Developer

Google Quantum AI Certification

HPC Certification Forum - Certified HPC Professional

Awards

Best Paper Award – International Conference on Quantum Computing 2023

European Research Council (ERC) Starting Grant 2022

Swiss National Science Foundation Fellowship 2021