

CONTACT

Phone: +41 76 261 16 89

LinkedIn: www.linkedin.com/in/peize-hu-406161313

Email: peizehu2005@gmail.com

EDUCATION

ETH Zurich | 2023 – present

Bachelor of Science in Mathematics

- Probability Theory
- Machine Learning
- Data Structures and Algorithms
- Brownian Motion and Stochastic Calculus (FS2026)
- Introduction to PDEs (FS2026)

Inter-Community School Zurich | 2017– 2023

International Baccalaureate (IB)

- Received the “Academic Achievement Award”
- Took 4 Higher Level Subjects: English, Mathematics, Chemistry, Physics
- Participated in olympiad level math courses at ETH Zurich

PROJECTS

GNN for Marcus-theory-driven electron transfer prediction | 2025

NexMR AG

- Implemented a graph neural network (GNN) that reached 80% prediction accuracy
- Worked with PyTorch, fairchem, UMA, Omol25 libraries
- Accelerated radical pair electron transfer prediction – a task that required days of expert analysis to seconds

RL-100 Model | 2025

ETH Robotics Club

- Worked on implementing a real-world reinforcement learning (RL) model for the ETH robotics club
- Implemented diffusion policies and autoencoders for imitation learning
- Learned about offline & online RL, generative modeling, and diffusion models
- LeRobot, PyTorch

RESEARCH

Bachelor Thesis on Optimal Transportation (to be completed in FS2026)

Supervisor: Prof. Dr. Alessio Figalli

- Explore the theoretical aspects of optimal transport, considering formulations such as Kantorovich and Benamou–Brenier

Applying the Fast Fourier Transform to Simplify Polynomial Multiplication | 2022–2023

- IB Extended Essay
- Applied the Discrete Fourier Transform (DFT), Fast Fourier Transform (FFT) to perform polynomial multiplication in log linear time
- Experience with algorithm complexity analysis, independent research, time-management and action planning

SKILLS

Computer Skills

- Python, C++
- PyTorch, SciKit, Fairchem, LeRobot, NumPy
- Numerical ODE, PDE solvers

Language Skills

- Native: Mandarin, English
- Fluent: German
- Intermediate: French