

## Education

<b>M.Sc. Mathematics in Data Science</b> Admitted	Oct 2025 – Oct 2027 Technical University of Munich
<b>B.Sc. Informatics</b> GPA: 3.6 (US), 1.6 (GER) — Minor: Mathematics	Oct 2021 – May 2025 Technical University of Munich
<b>High school diploma (Abitur)</b> GPA: 3.9 (US), 1.1 (GER)	Sep 2013 – Jul 2021 IKG Leinfelden

## Work / Research Experience

<b>Bachelor's thesis</b> Chair of Scientific Computing, TUM — Grade 100%	Oct 2024 – Feb 2025 Munich, GER
<ul style="list-style-type: none"><li>Research on node-level parallelization of high-fidelity molecular dynamics simulations</li><li>Efficient framework on multi-node simulator, demonstrating novel parallelization methods</li></ul> <p>Tech Stack: C++, C, Slurm linux cluster, Paraview, MPI — Links: <a href="#">Thesis</a></p>	
<b>Research Intern at "AI Factory Bavaria"</b> Chair of Robotics, Artificial Intelligence and Real-Time Systems, TUM	Feb 2024 – Aug 2024 Munich, GER
<ul style="list-style-type: none"><li>Research on efficient task and motion planning of mobile base + manipulator robots</li><li>Developed framework for combining variety of motion planning algorithms, doubling motion efficiency</li></ul> <p>Tech Stack: ROS, C++, MoveIt, Rviz, Ubuntu — Links: <a href="#">AI Factory Bavaria</a></p>	
<b>Software Engineer Working Student</b> Entrix Energy	Dec 2022 – Jul 2023 Munich, GER
<ul style="list-style-type: none"><li>Architecting optimized algo-testing service using historic energy market data</li><li>Developed revenue forecasting and streamlining development of trading algorithm</li></ul> <p>Tech Stack: AWS, Python, Pandas, Typescript — Links: <a href="#">Entrix Energy</a></p>	

## Extracurricular Activities

<b>Project: Experimental Quantitive Trading using ML models</b>	Apr 2025 - Present
<ul style="list-style-type: none"><li>Fetch data from Bybit API, retrieve features, train models and backtest / mock trade strategies on live data</li><li>Short term trend-predicting model with 75% trend accuracy on CAKEUSDT Perpetual</li></ul> <p>Tech Stack: Pytorch, Numpy, Bybit — Links: <a href="#">GitHub</a></p>	
<b>Project: Personal Pytorch Toolkit</b>	Jul 2025 - Present
<ul style="list-style-type: none"><li>Python package for seamless training, evaluation and visualization using Pytorch</li><li>Significant boilerplate code reduction and efficient hyperparameter tuning</li></ul> <p>Tech Stack: Pytorch, Numpy — Links: <a href="#">GitHub</a></p>	
<b>Network / System Administrator</b>	Apr 2024 - Present
<ul style="list-style-type: none"><li>Implementing / maintaining services within dormitory: dorm management software, cloud storage, WPA's</li></ul>	

## Skills

<b>Programming Languages</b>	C++, Python, C, Java, Dart, Go, JS, TS, OCaml
<b>Expertise and Tools</b>	Machine Learning, Optimization, AWS, Design Patterns, Probability Theory, Linear Algebra, DBMS, Numeric Programming, Energy Sector
<b>Languages</b>	Fluent in German, Japanese and English