

## Education

### B.Sc. Informatik

Bachelor's degree program

GPA: 3.6 (US), 1.6 (GER)

Minor: Mathematics

Technical University of Munich

Oct 2021 – Mar 2025

### Abitur

Highschool diploma

Major: Physics (15/15), Mathematics (14/15), English (13/15)

GPA: 3.9 (US), 1.1 (GER)

Immanuel-Kant-Gymnasium Leinfelden

Sep 2013 – Jul 2021

## Work / Research Experience

### Chair of Scientific Computing, TUM

Bachelor's thesis, Grade: 100% (US) / 1.0 (GER)

Oct 2024 – Feb 2025

Munich, GER

- Research on node-level parallelization of high-fidelity molecular dynamics simulations
- Implemented efficient framework on a multi-node simulator, demonstrating novel parallelization methods

Tech Stack: C++, C, Slurm linux cluster, Paraview, MPI — Links: [Thesis](#)

### Chair of Robotics, Artificial Intelligence and Real-Time Systems, TUM

Research Intern at "AI Factory Bavaria"

Feb 2024 – Aug 2024

Munich, GER

- Research on task and motion planning of mobile base + manipulator robots
- Implemented ROS-package for combined motion planning yielding up to double motion efficiency

Tech Stack: ROS, C++, MoveIt, Rviz, Ubuntu — Links: [AI Factory Bavaria](#)

### Entrix Energy

Software Engineer Working Student

Dec 2022 – Jul 2023

Munich, GER

- Architecting and implementing a renewed algo-testing service using historic energy market behaviour
- Facilitating revenue forecasting and optimizing the development of the trading algorithm
- Achieved tenfold reduction in runtime compared to the previous service

Tech Stack: AWS, Python, Typescript — Links: [Entrix Energy](#)

## Extracurricular Activities

### Network / System Administrator

Voluntary administrator for student dormitory

Oct 2024 - Present

Munich, GER

- Implementing and managing services provided within the dormitory, such as a dorm management software, cloud storage service and WPA's

Tech Stack: Proxmox, VLAN, PfSense, Wireguard, Debian — Links: [Dormitory](#)

### 30th Kobe International Students' Symposium

Leader and Organizer

Dec 2024

Osaka, JPN

- Planned, prepared and implemented bilingual (JP and EN) symposium aimed at developing leadership and intercultural competency, hosted by Kobe University
- Held a weekly 90-minute preparation course of the symposium, consisting of 30 participants from 16 countries to debate and collaborate on its organization

Links: [KISS \(Translated\)](#), [Course description](#)

## Hackatum 2023

Invited to discuss solution at Check24 HQ

Mar 2023

St. Gallen, SWZ

- Developed a performance enhanced distance and rating based craftsman comparison algorithm

Tech Stack: C++, Redis, NextJS — Links: [Repo](#)

## START Hack 2023

Europe-wide event with 1500 participants

Mar 2023

St. Gallen, SWZ

- Developed an user-experience centered android application for extending the modern use of broadcast TV (Sunrise Challenge)
- Core idea: Enhance user interaction with the platform and other users to enrich the user experience, whilst enabling personalized ads for increased revenue

Tech Stack: Go, SQLite, React Native — Links: [Demo Video](#), [GitHub](#)

## Skills

---

### Programming Languages

C++, Python, C, Java, Dart, Go, JS, TS, OCaml

### Expertise and Tools

Linux, Optimization, AWS, Design Patterns, Git, OS, DBMS, Numeric Programming, Energy Sector, Docker

### Languages

Fluent in German, Japanese and English