

Ole Petersen

✉ peteole2707@gmail.com  Github  LinkedIn ☎ +4915209425618 🏠 Portfolio

EDUCATION

Technical University of Munich, *Master of Computational Science and Engineering* From 10/2023
Interdisciplinary program with a focus on numerical simulation on high-performance computers

Technical University of Munich, *Bachelor of Engineering Science* 09/2020 - 11/2023

- GPA: 1.3 (in German Grading System), ranking in the top 3% of the graduates in my year
- Broad scientific education with a special focus on mathematical modeling and simulation
- On average 170% of the intended workload due to various additional modules of interest
- Relevant modules: Quantum Mechanics, Introduction to Deep Learning, Machine Learning for Graphs and Sequential Data, Distributed Systems, Algorithmic Game Theory...
- Bachelor Thesis on Reinforcement Learning with a financial model
- Term abroad at the University of Exeter, UK

SKILLS

- **Programming Languages:** Typescript, Golang, Rust, Julia, Python, Java, C++, SQL
- **Tools:** Kubernetes, Docker, Terraform, Helm, Grafana, React, Tensorflow, PyTorch
- **Scientific:** Tensor Calculus, Optimization, Data Structures and Algorithms, Statistics
- **Languages:** German (native), English (fluent), Spanish (basics), French (basics)

EXPERIENCE

QAware/Telekom, *Platform Engineering Working Student* 10/2020 - 09/2023

- Maintained a scalable Cloud-Native platform for the Telekom smart speaker
- Collaborated with international teams
- Built and improved internal tools, CI/CD pipelines, IaC, observability dashboards...

Bundeswettbewerb Informatik, *Jury Member* Since 12/2020

Graded submissions to Germany's most influential computer science competition

Hochschulhaus Garching, *Tutor* Since 05/2023

Organized community events in my dormitory

AWARDS

relAI scholarship, *scholarship holder, student representative* Since 10/2023

Scholarship focused on reliable AI, supporting outstanding TUM and LMU students in the field of AI with mentoring, networking events, and 934€ monthly during their Master's studies

CHECK24 GenDev, *scholarship holder* Since 05/2023

Scholarship supporting twelve students talented in SE with workshops and 450€ monthly

Deutschlandstipendium, *scholarship holder* Since 09/2021

Scholarship based on academic performance and social commitment, supporting students with 300€ monthly

Bundeswettbewerb Informatik, *awardee* 09/2020

One of ten awardees in the final run of Germany's most influential computer science competition

Mathematical Olympiad, federal level, *finalist* 2018, 2020

One of 192 finalists in the federal round of Germany's most influential math competition

PROJECTS

Bachelor Thesis in Reinforcement Learning, *author* 05/2023 - 10/2023

- Employed Multi-Agent Reinforcement Learning on a financial model
- Found new Nash equilibria in the

Probabilistic data integration engine, *Developer* 10/2022 - 04/2023

Developed a data integration that can work with probabilistic data sources in Rust

Huddle, *Student Project Platform Founder* 06/2021 - 09/2023

- Founded a university group that builds a student project platform
- Students can share their side projects and browse project ideas
- Technology stack: React, Golang, Postgres, Ory Kratos and Kubernetes

Ferienakademie, *Project Contributor* 09/2021

Developed of a decentralized task distribution system based on auctions during a 10-day seminar

Covid Simulation, *Developer* 12/2020 - 01/2021

- Developed a Monte-Carlo simulation of covid infection risks based on a list of contacts
- Technology stack: lit-element, Typescript, dygraphs, Web Workers

Aircraft Telemetry, *Developer* 2019-07 to 2020-06

Developed the hardware and software required for collecting, processing, transmitting and visualizing live flight data from radio-controlled aircraft (Video)