Konstantin Preußer

Kreuzgasse 36, 65510 Idstein, Germany
Konstantin.Preusser@gmx.de — +49 179 3239419
https://1preusse.github.io/

Profile

Dedicated master's student in Medical Technology with a strong focus on Data Science. Solid experience in developing new algorithms, optimizing processes, and data processing. Technologically versatile with an interest in interdisciplinary projects and simple, practical solutions.

Education

- **Since 10/2023** *M.Sc. Medical Technology*, TU Darmstadt & Goethe University Frankfurt
  Specialization: Robotics and Medical Data Science. Current GPA: 1.8 (German system).
  Expected graduation: 2025.
- **09/2024 – 02/2025** *Semester Abroad*, Universitat Politècnica de València
  Erasmus Scholarship at ETSIT, UPV.
  Courses: Deep Learning for NLP, Deep Reinforcement Learning.
- **10/2019 – 09/2023** *B.Sc. Medical Technology*, TU Darmstadt & Goethe University Frankfurt
  GPA: 2.33 (German system).
- **10/2019 – 03/2023** *B.Sc. Electrical Engineering (Computer Engineering)*, TU Darmstadt
  GPA: 2.29. Bachelor Thesis: "Robust Placement and Control of Phase-Shifting Transformers" (Grade: 1.0).
  Technologies: Python, Julia, Gurobi.
- **08/2017 – 05/2019** *High School Diploma (Abitur)*, Pestalozzi School Idstein
  GPA: 1.8. Advanced Courses: Mathematics, Physics.
  Award for exceptional achievements in Physics (German Physical Society).

Work Experience

- **09/2024 – Present** *Self-Employed*
  Web Development
  Development of a travel planning website and a bonus system platform for small businesses.

- **10/2023 – 08/2024** *Research Assistant (HiWi)*, EINS Institute, TU Darmstadt
  Project: Medium-Voltage Grid Data Analysis
  Development of algorithms and database for analyzing and reconstructing incomplete grid data (Python, SQL).
  Outcome: Improved data quality and enhanced usability for analyses.
- **02/2022 – 08/2023** *Research Assistant (HiWi)*, EINS Institute, TU Darmstadt
  Project: Resilience of Low-Voltage Grids
  Developed a visualization tool for grid resilience (Python, MATLAB, ReactJS).
  Optimized runtime by 90% (from 5 minutes to 23 seconds).
  Successfully presented results to industry partners and researchers.
- **04/2021 – 03/2022** *Tutor*, TU Darmstadt
  Conducted exercise sessions (20 participants) and lecture tutorials (100 participants) for computer science and electrical engineering courses.

Side Projects

- **Web Development:** Personal website.
- **AI:** Development of trading bots using OpenAI's Gym, fine-tuning LLMs with LoRa.
- **Arduino:** Developed an alarm for speed cameras, a remote-controlled vehicle, and a traffic light system.

Skills

- **Programming Languages:** Python, MATLAB, C/C++, JavaScript, Java, Julia.
- **Tools & Frameworks:** PyTorch, ReactJS, Keras, Transformers, PEFT, Gurobi, ROS, Arduino.
- **Databases:** Postgres, MySQL.
- **Languages:** German (native), English (fluent), Spanish (B1), French (basic).

Interests

Swimming, Guitar, Piano, Ultimate Frisbee, Reading.