Pedro Müller

Education

- **Technical University Munich (TUM)** — Munich, Germany
  Master of Science in Electrical Engineering and Computer Science — *2018 – 2021*
  - Specialization: Power Engineering and Renewable Energies
  - Exchange Program: University of Oulu, Finland (2019)
- **FEUP - Faculty of Engineering, University of Porto** — Porto, Portugal
  Bachelor of Science in Electrical Engineering and Computer Science — *2015 – 2018*
  - Program: Electrical and Computer Science with focus on Power Engineering
- **Deutsche Schule Porto (German School of Porto)** — Porto, Portugal
  Abitur — *2003 – 2015*

Experience

- **Ostrom** — Berlin, Germany
  Software Engineer — *Feb 2023 – Present*
  - Energy Management Platform: Developed and maintained a scalable energy management platform serving over 70,000 clients, implementing real-time monitoring and control systems for distributed energy resources.
  - Charging Optimization: Designed and implemented advanced charging algorithms that optimize energy consumption patterns, reducing costs through intelligent load management and time-of-use optimization.
  - Virtual Power Plant: Contributed to the development of a virtual power plant system that successfully participated in energy markets, generating revenue through optimized vehicle charging and energy trading strategies.
- **pragmatic industries GmbH** — Germany
  Software Engineer — *Nov 2021 – Feb 2023*
  - Backend Development: Led backend functionality development and translated user requirements into actionable tasks.
  - Quality Assurance: Conducted extensive unit tests and resolved issues. Implemented automated testing pipelines.
  - Client Relations: Facilitated client communication and maintained relationships. Created demo environments for solution showcasing.
  - Regulatory Coordination: Coordinated and moderated regulatory meetings with clients.
- **Siemens Energy** — Munich, Germany
  Research Assistant — *Jun 2021 – Sep 2021*
  - Techno-economic Analysis: Conducted analysis of hydrogen transport options using linear optimization.
  - Research: Managed data research for regional projections of future hydrogen demands.
  - Validation: Validated German gas network model and completed Master's thesis on hydrogen transport infrastructure options.

Skills

- **Languages**: TypeScript, JavaScript, Python
- **Frameworks**: Django, NestJS, React Native, Flask
- **Cloud**: AWS (Certified Cloud Architect)

Languages

- **Native/Bilingual**: German, Portuguese, English
- **Limited Working**: Spanish, French