

# Pedro Müller

## EXPERIENCE

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- **Ostrom** Berlin, Germany  
*Software Engineer* Feb 2023 – Present
  - Energy Management Platform: Developed and maintained a scalable energy management platform serving thousands of 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.
- **Siemens Energy** Munich, Germany  
*Research Assistant* Oct 2020 – 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.

## EDUCATION

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- **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

## TECHNICAL SKILLS

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- **Programming Languages:** TypeScript, JavaScript, Python, SQL
- **Backend Development:** NestJS, Django, Flask, Node.js, REST APIs
- **Cloud & Infrastructure:** AWS (Certified Cloud Architect), Terraform, Docker, CI/CD
- **Tools & Methodologies:** Git, Agile Development, Unit Testing

## LANGUAGES

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