

AI Engineer & Researcher focused on foundation models and applied machine learning. Experienced in developing, fine-tuning, and deploying transformer architectures and RAG pipelines across research and enterprise environments.

## PROFESSIONAL EXPERIENCE

Mar 2025 – Sep 2025  
Full-time internship  
Tokyo, Japan

### AI Researcher - Japan National Institute of Informatics

- Researched AI for time series prediction. Fine-tuned, evaluated, and deployed foundation models.
- Developed and evaluated novel transformer-based architectures for structured financial data.
- Coauthored paper on transformer-based time series forecasting; basis for Master's thesis.

Aug 2024 – Nov 2024  
Full-time internship  
Munich, Germany

### IT Strategist - Munich Re AG

- Conducted and managed tech trend research, culminating in an externally published report.
- Tracked and supported internal as well as external IT product compliance.
- Studied new insurance opportunities and enhanced external partner satisfaction and performance.

May 2024 – Aug 2024  
Full-time internship  
Munich, Germany

### AI Engineer - Munich Re AG

- Contributed, presented, and demoed an internal tool utilizing RAG/Semantic Search.
- Conducted a vector database migration to Azure, resulting in a 30% performance improvement.
- Developed a POC for Apache Airflow as a workflow orchestrator.

Sep 2023 – Apr 2024  
part-time internship  
Munich, Germany

### Software Engineer - Siemens AG/KeySpot GmbH

- Implemented ML-driven table recognition software for technical datasheets.
- Built and deployed a microservice for automatic document format conversion.
- Evaluated libraries for document change detection and management.

## ACADEMIC EDUCATION

Apr 2022 - Oct 2025  
Munich, Germany

### M.Sc. Robotics, Cognition, Intelligence - Technical University of Munich (proj. 1.4/US GPA 3.7)

- Master's thesis in the field of AI for Financial Time Series Classification.

Aug 2022 - Dec 2023  
Taipei, Taiwan

### Exchange semester - National Taiwan University (1.4/US GPA 3.7)

- Coursework consisted of 24 ECTS spanning Robotics, Bioinformatics, Automata Theory, and Mandarin.

Oct 2018 - Apr 2022  
Munich, Germany

### B.Sc. Electrical and Computer Engineering - Technical University of Munich (1.9/US GPA 3.1)

- Bachelor's Thesis in the field of Deep Learning Recommender Systems.

## SKILLS & QUALIFICATIONS

### Programming:

Python, Go, C++, C, Solidity, JavaScript

### AI/ML:

PyTorch, TensorFlow, HuggingFace, Optuna, Tensorboard, scikit-learn, pandas, NumPy

### Deployment:

Git, Docker, Azure, Anaconda, Databricks, Linux, CI/CD

### Visualization:

Matplotlib, Seaborn, NetworkX

### Websites:

Django, React, HTML, CSS, Streamlit, Scrapy, Selenium

### Other Tools:

Obsidian, Hyperledger Fabric, LaTeX, Gemini CLI, MATLAB, ROS

### Languages:

German (mother tongue), English (mother tongue), Spanish (B1), Mandarin (A2)

## PROJECTS

**Blockchain Sustainability Tracker:** Built a blockchain-based CO<sub>2</sub> token tracking system for supply chain transparency. Modeled emissions and material exchanges to ensure verifiable and confidential tracking using Solidity and Hyperledger Fabric.

**Robotic Painting Arm:** User input was captured by speech detection and sent to DALL-E for image creation. Anipainter converted images into brush strokes, which were then painted with acrylics by a robot arm (TM5-700).

**Creative Greeting Card:** Developed a full-stack, reactive web app for generative multimedia greeting cards, exploring computational creativity via NLP and image synthesis models.

## LEISURE & VOLUNTEERING

**PADI Dive Master:** Leading, managing, coordinating dives, and assisting in teaching with up to 12 divers.

**Network Administrator - Dormitory:** Managed network infrastructure for ~40 residents.

**Mentor incoming exchange students:** Supporting incoming students with educational and general questions.