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|---------|---|-------------------------|----------|---|--------------------------|
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**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

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|---|---|
| <b>Mar 2025 – Sep 2025</b><br>Full-time internship<br>Tokyo, Japan    | <b>AI Researcher - Japan National Institute of Informatics</b> <ul style="list-style-type: none"><li>- Researched <u>AI for time series prediction</u>. Fine-tuned, evaluated, and deployed foundation models.</li><li>- Developed and evaluated <u>novel transformer-based architectures</u> for structured financial data.</li><li>- <u>Coauthored paper</u> on transformer-based time series forecasting; basis for Master's thesis.</li></ul> |
| <b>Aug 2024 – Nov 2024</b><br>Full-time internship<br>Munich, Germany | <b>IT Strategist - Munich Re AG</b> <ul style="list-style-type: none"><li>- Conducted and managed <u>tech trend research</u>, culminating in an <u>externally published report</u>.</li><li>- Tracked and supported internal as well as external <u>IT product compliance</u>.</li><li>- Studied <u>new insurance opportunities</u> and enhanced <u>external partner satisfaction and performance</u>.</li></ul>                                  |
| <b>May 2024 – Aug 2024</b><br>Full-time internship<br>Munich, Germany | <b>AI Engineer - Munich Re AG</b> <ul style="list-style-type: none"><li>- Contributed, presented, and demoed an <u>internal tool</u> utilizing <u>RAG/Semantic Search</u>.</li><li>- Conducted a <u>vector database migration</u> to Azure, resulting in a <u>30% performance improvement</u>.</li><li>- Developed a <u>POC for Apache Airflow</u> as a workflow orchestrator.</li></ul>  |
| <b>Sep 2023 – Apr 2024</b><br>Part-time internship<br>Munich, Germany | <b>Software Engineer - Siemens AG/KeySpot GmbH</b> <ul style="list-style-type: none"><li>- Implemented <u>ML-driven table recognition</u> software for technical datasheets.</li><li>- Built and deployed a <u>microservice</u> for automatic <u>document format conversion</u>.</li><li>- Evaluated libraries for <u>document change detection</u> and management.</li></ul>   |

## ACADEMIC EDUCATION

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|---|---|
| <b>Apr 2022 - Oct 2025</b><br>Munich, Germany | <b>M.Sc. Robotics, Cognition, Intelligence - Technical University of Munich (1.4/US GPA 3.7)</b> <ul style="list-style-type: none"><li>- Master's thesis in the field of AI for Financial Time Series Classification.</li></ul> |
| <b>Aug 2022 - Dec 2023</b><br>Taipei, Taiwan  | <b>Exchange semester - National Taiwan University (1.4/US GPA 3.7)</b> <ul style="list-style-type: none"><li>- Coursework consisted of 24 ECTS spanning Robotics, Bioinformatics, Automata Theory, and Mandarin.</li></ul>      |
| <b>Oct 2018 - Apr 2022</b><br>Munich, Germany | <b>B.Sc. Electrical and Computer Engineering - Technical University of Munich (1.9/US GPA 3.1)</b> <ul style="list-style-type: none"><li>- Bachelor's Thesis in the field of Deep Learning Recommender Systems.</li></ul>       |

## SKILLS & QUALIFICATIONS

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|-----------------------|--|
| <b>Programming:</b>   | Python, Go, C++, C, Solidity, JavaScript   |
| <b>AI/ML:</b>         | PyTorch, TensorFlow, HuggingFace, Optuna, Tensorboard, scikit-learn, pandas, NumPy |
| <b>Deployment:</b>    | Git, Docker, Azure, Anaconda, Databricks, Linux, CI/CD                             |
| <b>Visualization:</b> | Matplotlib, Seaborn, NetworkX  |
| <b>Websites:</b>      | Django, React, HTML, CSS, Streamlit, Scrapy, Selenium                              |
| <b>Other Tools:</b>   | Obsidian, Hyperledger Fabric, LaTeX, Gemini CLI, MATLAB, ROS                       |
| <b>Languages:</b>     | German (mother tongue), English (mother tongue), Spanish (B1), Mandarin (A2)       |
| <b>Nationalities:</b> | German, American, Swiss  |

## 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.
- Hobbies:** Surfing, diving, cooking & baking, volleyball, reading, traveling, and learning languages