

WORK EXPERIENCE

University of Applied Sciences Cologne 2022-2023	Research Assistant at the Institute for Data Science, Engineering, and Analytics Support for the further development of the 'Sequential Parameter Optimization Toolbox' (SPOT) and its extension for hyperparameter tuning via 'keras/tensorflow'.
BMW Motorrad, Berlin 2021-2022	Virtual and Augmented Reality Internship Planning and initiating a change management process for the productive applications of Virtual and Augmented Reality tools in the early status of the development process.
Siemens Technology, Munich 2020-2021	Artificial Intelligence Research Internship Research on methods of artificial intelligence and their potential to enhance production systems. Developing a proof of concept for an artificial intelligence in production control.
University of Applied Sciences Cologne 2019-2020	Information Technology Tutor Teaching C++, especially for programming a microcontroller. Assisting the professor in developing new and better technics for IT-teaching.

EDUCATION

University of Applied Sciences Cologne 2021-2023	Automation and IT (Master of Engineering) Focus: Machine Learning and Data Science GPA: 1,9
University of Applied Sciences Cologne 2017-2021	Production and Logistics (Bachelor of Engineering) Focus: Production and Automation GPA: 1,5
DBG, Bergisch Gladbach 2007-2015	Abitur Grade: 2,1

PROJECTS

University of Applied Sciences Cologne 2022-2023	Distributed wind speed analysis system for rural areas In cooperation with the Tanzania Research Fund. Supervised by Prof. Dr. Felix Hackelöer & Prof. Dr. Michael Freiburg.
University of Applied Sciences Cologne 2021-2022	Data Science Platform Conceptual design and interdisciplinary development of a web platform for data engineering and analysis hosted by streamlit.
Siemens Technology, Munich 2020-2021	Multi Agent Reinforcement Learning (Bachelor Thesis) Implementing an Online Scheduling Approach for Production with Multi Agent Proximal Policy Optimization (MAPPO). DOI: 10.1007/978-3-030-85914-5_62
University of Applied Sciences Cologne 2019-2020	Adversarial Attacks on a Traffic Sign Recognition AI Attacking an AI based on the German Traffic Sign Recognition Benchmark (GTSRB) dataset using the Fast Gradient Sign Method (FGSM).

EXPERTISE

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| ● Machine Learning
Tensorflow, Keras, Scikit-Learn | ● Programming
Python (Pandas, Numpy, Streamlit), R, GIT | ● Languages
German (Native), English (Fluent) | ● Simulation
Technomatix, Unisim, Scilab | ● Engineering
CAD, IoT, Project and Change Management |
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