ARHAM BIN TARIQ

Munich, Germany

arhambintariq.com

arhambintario

WORK EXPERIENCE

Research Assistant - ML Enhanced Sensors Fraunhofer EMFT

- **July 2023 August 2025**
- Munich
- Developed and evaluated ML models end-to-end, including data collection, labelling, pre-processing, training and deployment
- Optimised models to reduce size and latency, and deployed them on embedded devices using TensorFlow Lite and STM32 CubeAI

Research Assistant - Edge Al Systems

Fraunhofer EMFT

- October 2021 June 2023
- Munich
- Trained, optimised and deployed neural networks for time-series sensor data on STM32 Microcontrollers
- Built a framework to systematically evaluate accuracy, inference time, and memory usage of deployed models on embedded devices

Research Assistant - Deep Learning for Computer Vision Institute for Photonic Systems - Hochschule Weingarten

- December 2020 April 2021
- Weingarten
- Built the deep learning module for an app to predict shoe size from foot image contours

Intern - Software Architecture Development

ZF Friedrichshafen AG

- **August 2019 February 2020**
- Friedrichshafen
- Developed ECU modules for automated software integration, flash process and runtime analysis

EDUCATION

M.Sc. Robotics, Cognition, Intelligence **Technical University of Munich**

October 2021 - Ongoing

- Thesis: Event Detection in High-frequency Multivariate Time Series for Tiny Machine Learning
- Focus Areas: Probabilistic Machine Learning, Robust Machine Learning, Foundation Models, Optimisation Algorithms

B.Eng. Electrical Engineering and Information Technology

Ravensburg-Weingarten University of Applied Sciences

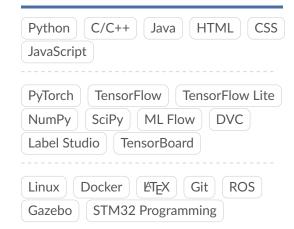
- March 2017 August 2021
- Thesis: Navigation Control for an Autonomous Mobile Robot using Deep Reinforcement Learning
- Focus Areas: Reinforcement Learning, Robot Motion Planning, Computer Vision, Real-time Systems

PUBLICATIONS

Conference Proceedings

K. Axelsson, A. B. Tariq, G. Zerbib, M. Richter, and C. Kutter, "Self-sensing of piezoelectric actuators: Integrated bubble detection for reliable drug dosing," in MikroSystemTechnik Kongress, 2023.

SKILLS



LANGUAGES

Urdu		• • •
English	• •	• • •
German	• •	• • •
Swedish	• •	• • •
Japanese	• •	• • •

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