Tim Straube | Cirriculum Vitea

Sankt Stephansplatz 14 − 78462 − Konstanz **★** 06.02.2002 • □ +49 0179 6997024 • ☑ tileone02@posteo.de

Education Marie Curie Gymnasium Kirchzarten Abitur 2012 - 2020 **HTWG** Konstanz Bachelor of Electrical Engineering and Information Technology October 2020 - Februar 2025 Konstanz Tutor for Ordinary Differential Equations, Fourier- and Laplace transforms March 2024 - September 2024 Fraunhofer Institute for Solar Energy Systems Freiburg im Breisgau Summer semester 2023 Internship Fraunhofer Institute for Solar Energy Systems Freiburg im Breisgau September 2023 - September 2024 Scientific assistant HTWG Konstanz Bachelorthesis July 2024 - November 2024 **Projects** Quadcoptersystem, Bachelorthesis Development of a quadcoptersystem from scratch, including a joystick interface, the power train and a custom flight controller. Experiments were performed in training pid-parameters as well as a control policy with deep reinforcement learning. Solving battleship with AlphaZero, Project Adaptation of an existing AlphaZero implementation to play battleship superhumanly. Communication theory, Project Implementation of a Coded-OFDM system in MATLAB. Distributed systems, Project Building a microcontroller network to exchange MQTT-based sensor values while at the same time hosting REST servers as user interfaces for parameter variation on each microcontroller. Projects at Fraunhofer..... Development of a desktop application for calculating current-voltage characteristics of photovoltaic modules from layout and topology data as well as calculation of optimal topologies and cell layouts followed by thermal simulations and factory planning with Tecnomatix. Information technology Languages Assembler, C. Python, MATLAB, SimTalk, Javascript Operating Systems Linux, Windows, RTOS, Zephyr Language German Mother tongue English C1, Fluent in realtime **Interests** Biking All year round

Flight and transport simulations

Since childhood days