# Tim Leonard Straube | Cirriculum Vitea

Sankt Stephansplatz 14 − 78462 − Konstanz

★ 06.02.2002 • ☑ tileone02@posteo.de

# **Education and experiance**

Marie Curie Gymnasium

**Kirchzarten** 2012 – 2020

Abitur **HTWG** 

Konstanz

Bachelor of Electrical Engineering and Information Technology

October 2020 – Februar 2025

HTW

Konstanz

Tutor for Ordinary Differential Equations, Fourier- and Laplace transforms

March 2024 – September 2024

Fraunhofer Institute for Solar Energy Systems

Freiburg im Breisgau

Internship

Summer semester 2023

Fraunhofer Institute for Solar Energy Systems

Freiburg im Breisgau

Scientific assistant

September 2023 – September 2024

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