# Elías Hauksson

# EDUCATION

# École polytechnique fédérale de Lausanne

Jun 2025

B.S. Electrical and Electronic Engineering

# Kantonsschule Zug

Jun 2021

Matura, Physics and Applied Mathematics

## Coursework

Courses: Analysis, Linear Algebra, Probability & Statistics, Mechanics, Thermodynamics, Electromagnetism, Project oriented programming, Data Science, Logic systems, Circuit & Systems, Electronics, Microcontrollers, Signals & Systems, Electromagnetics: Transmission lines & Field computations

#### SKILLS

Programming: C/C++, Python, Bash, Clojure, Java

Libraries/Frameworks: Numpy, Pandas, Matplotlib, Tensorflow

Tools/Platforms: Linux, STM32, Arduino, Raspberry Pi, KiCAD, FreeCAD, CATIA Languages: German (native), Icelandic (native), English (proficient), French (intermediate)

# **PROJECTS**

## Avionics Module for Model Rocket | C++, Arduino

2022

- Developed an avionics module for a LV1 model rocket, incorporating telemetry and sensor technology for flight monitoring.
- Implemented software to trigger recovery events, optimizing the rocket's safe descent and recovery.
- Collaborated in a team setting, utilizing skills in electronics and programming to contribute to a key component of the rocket.

## Plant Health Monitor | Python, OpenCV

2021

- Developed a computer vision-based plant health monitor for matura thesis.
- Implemented NDVI analysis using dual-camera setup to accurately detect plant health anomalies.
- Demonstrated independent project completion skills in image processing and data analysis.

## EXPERIENCE

## Hauksson Weine GmbH | Robotics Engineer

Jul 2022 - Dec 2022

- Engineered and implemented enhancements to a vineyard rover platform, including hardware and software components
- Designed and trained a TensorFlow-based AI model to enable autonomous vineyard navigation for the rover.
- Managed the project independently, gaining hands-on experience in robotics and AI programming.

# Swiss Post | Data Analysis Intern

Sep 2019 - Oct 2019

- Analyzed photovoltaic system performance on postal centers to optimize cleaning schedules for more efficiency.
- Conducted advanced data analysis on customer behaviour to identify delivery anomalies and improve parcel delivery services.

## Hobbies

**3D Printing:** I enjoy 3D printing to bring creative ideas to life.

Mountaineering: I explore mountains through trail running, climbing, and hiking.