

Manuel Schmid

Electronics engineer with experience designing power electronics, embedded systems, & general electronics. Proven ability to lead customer-facing projects, & develop both hardware & software.

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EXPERIENCE

ZHAW Institute of Energy Systems & Fluid Engineering, Winterthur ZH — Research Assistant

August 2021 - PRESENT

Development of battery systems, power electronics, sensors & measurement electronics. Project management with direct customer contact

ZHAW Institute of Energy Systems & Fluid Engineering, Winterthur ZH — Student Assistant

March 2019 - July 2021

Assisting in industry projects with schematic & PCB design, embedded software development, assembling prototypes, repairing circuits & metalworks

Variosystems AG, Steinach SG — Apprenticeship Electronics Technician

August 2013 - July 2017

Insight into the full production chain of PCBAs. Soldering training by certified IPC trainers. Supporting engineers by assembling prototypes & test systems, designing schematics & PCBs, & developing software

EDUCATION

ZHAW, Winterthur ZH — Master of Science in Engineering, not completed (51 out of 90 ECTS completed)

August 2022 - January 2025

ZHAW, Winterthur ZH — Bachelor of Science ZFH in Electrical Engineering

August 2018 - July 2021

PROJECTS

QR & Barcode Recognition for Nutrition Tracking Systems — Master's Project Thesis

In collaboration with an ETH startup I developed a software that detects food trays, sensors sensitive patient data, & reads QR & barcodes using a 3D camera.. The software runs on a Nvidia Jetson.

Battery Management System Concept & Prototype for Formula Student — Bachelor's Project Thesis

I created a concept & a hardware prototype for a modular battery management system.

SKILLS

ECAD: Altium Designer, KiCad

MCAD: Autodesk Inventor, Autodesk Fusion, Onshape

Manufacturing: 3D Printing, Soldering, Power and Hand Tools, PCB Etching

Programming: ARM & AVR Assembly, C/C++, Python, MATLAB, Java, C#, SQL, VHDL

Software: Microsoft Office, Unity 3D, Git, LTspice Simulink, Linux, PyTorch, Keras

Electrical: Embedded Systems, Power Electronics, Digital & Analog Signal Processing, Control Design

Certificates

TOEFL iBT English Certificate, 98 out of 120 points, 11/2019

Cambridge English First B2, 05/2018

C++ Programming Professional Certificate by OpenEDG C++ Institute, 06/2025

LANGUAGES

German: native

English: fluent

French: basics