



Florian Römer

ELECTRICAL ENGINEERING
STUDENT

- Dresden, Germany
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LANGUAGES

German	Native
English	Excellent
French	B1
Chinese	Beginner

LINKS

- linkedin.com/in/florian-römer-dd
- github.com/floriroemer

This is a selection of my skills. I have more experience across various tools and technologies. Feel free to contact me if you have any questions!

Florian Römer

Electrical Engineering Student · Embedded Systems · Hardware/Software Integration

PROFILE

Electrical Engineering and Information Technology student at HTW Dresden, specializing in embedded systems, sensor fusion, and BLE-based localization. Currently completing a diploma thesis at Metirionic GmbH while simultaneously developing AI-assisted engineering tools at Embedded Foundry Inc. International experience across Germany, Australia, and the United States, with a strong foundation in firmware development, automated testing, PCB design, and 3D modeling.

EXPERIENCE

Metirionic GmbH / Diploma Student MAR 2026 – PRESENT · DRESDEN

- Working on BLE-based localization and sensor fusion as part of the diploma thesis.
- ▶ Researching and implementing Bluetooth Low Energy-based positioning algorithms
 - ▶ Developing sensor fusion techniques combining multiple data sources for improved localization accuracy
 - ▶ Integrating hardware and software components in an embedded systems environment

Embedded Foundry Inc. / AI Systems Developer

- APR 2025 – PRESENT · COLORADO SPRINGS, CO / REMOTE
- Developing AI-assisted software systems for embedded engineering workflows.
- ▶ Building AI-powered tools that streamline embedded engineering processes
 - ▶ Integrating LLM APIs into engineering software pipelines
 - ▶ Collaborating remotely with a US-based team across time zones

Aegis Digital Technologies / Co-Founder FEB 2025 – JUN 2025 · REMOTE

- Co-founded a digital technology venture focused on software and engineering-related solutions.
- ▶ Established company direction and technology stack from the ground up
 - ▶ Developed software and engineering solutions for clients

RØDE / Firmware Cadet

- AUG 2024 – JAN 2025 · SILVERWATER, NSW, AUSTRALIA
- Developed and maintained Python programs and modules for automating firmware, software, and hardware testing processes.
- ▶ Collaborated with engineers to validate firmware releases
 - ▶ Wrote scripts for automated testing and data analysis
 - ▶ Debugged hardware/software integration issues
 - ▶ Documented test results for the engineering team

SKILLS

EDA

Eagle

Altium Designer

KiCad

EasyEDA

CAD

Onshape

Fusion 360

FreeCAD

PROGRAMMING

C

C++

Python

Assembly

C#

ENGINEERING

Basic RF engineering

Embedded systems

HW/SW integration

Sensor fusion

TOOLS

Git

LaTeX

MATLAB

Docker

Linux

SMALL EXPERIENCE IN

VHDL

Flask

TypeScript

JavaScript

Web dev

AI/LLM APIs

HOBBIES

3D printing

FPV drones

Brazilian Jiu-Jitsu

Chess

LICENSES

Car License

Class B

Drone Licenses

A1/A3 Open

EXPERIENCE

Metirionic GmbH / Intern & Working Student

AUG 2021 – OCT 2024 · DRESDEN

Worked in multiple roles across software development, Python programming, engineering support, 3D modeling, and prototyping.

- Gained experience with FreeCAD and Autodesk Fusion 360 for 3D modeling tasks
- Contributed to practical hardware/software-related development tasks
- Supported engineering teams across multiple project phases over 3+ years

Fraunhofer IWU / Working Student

MAR 2023 – AUG 2023 · DRESDEN

Worked on generative design, software development, 3D printing, and C#-based engineering tasks.

- Applied generative design principles to engineering problems
- Developed software tools using C# for engineering applications
- Worked with 3D printing technologies for rapid prototyping

EDUCATION

HTW Dresden / Diploma in Electrical Engineering & Information Technology

EXPECTED SEP 2026 · DRESDEN

Focus areas: embedded systems, sensor fusion, BLE-based localization, software development, and hardware/software integration.

- Specializing in embedded systems and hardware/software integration
- Current diploma thesis: BLE-based localization and sensor fusion (at Metirionic GmbH)
- Winner of the First Year Student Challenge (2023)

Evangelisches Kreuzgymnasium Dresden / Abitur

GRADUATED 2022 · DRESDEN

AWARDS

Winner — First Year Student Challenge, Faculty of Electrical Engineering

JUL 2023 · HTW DRESDEN

Part of the winning student team for the project "Smarte Fahrradbeleuchtung", an Arduino-based smart bicycle lighting system with automatic front/rear light control, dimming concept, turn signal functionality, battery supply, and button control.

[HTW Dresden News Article →](#)