Kilian Pfeifer

Electronics and Computer Engineering · HTL St. Pölten

St. Pölten, Lower Austria
kilian.pfeifer@htlstp.at
github.com/gamslet111
As of November 2026

PROFILE

Final-year student at HTBLuVA St. Pölten, specialising in Wireless Systems. I develop hardware and firmware from the first idea through schematic and PCB to a working device — preferably with few, robust components.

EDUCATION

2021–2027 **HTBLuVA St. Pölten — Electronics and Computer Engineering**
Focus on Wireless Systems · Graduation 2027

2026 **Cambridge English: First (B2)**
Language trip to Malta · Open Water Diver

2025 **Botball GCER, Norman (Oklahoma)**
Overall Judges' Choice Award with the Skilled Penguins (SKP 604)

PROJECTS

2026/27 **Diploma thesis: Portable lab power supply with function generator**
Two output channels, USB-PD input up to 140 W, function generator up to 50 MHz; 4-layer PCB in Altium, ESP32 firmware. With Matthias Wessely.

2026 **Wander-Navi**
GPS hiking navigator on ESP32-S3 with offline maps and GPX recording; Raspberry Pi server with a web interface for routes and analysis.

2025/26 **PD battery pack**
USB-C power bank with Power Delivery: custom PCB, PD negotiation and charge controller. With Matthias Wessely.

2026 **Bluetooth amplifier**
Class-D stereo amplifier with Bluetooth 4.2 and TPA3125D2; 4-layer SMD PCB in Altium, 3D-printed enclosure.

2025/26 **Vending machine**
Class project with Valentin Ulm: mechanics, electronics and control.

2026 **Component inventory**
Python tool with camera and vision model for recognising and inventorying components.

WORK EXPERIENCE

Summer 2026 **Summer job in shift work**
Shift work during the summer holidays.

SKILLS

HARDWARE	Altium Designer, EasyEDA, KiCad, 4-layer PCBs, soldering, measurement
FIRMWARE	C / C++, PlatformIO, ESP32, Arduino
SOFTWARE	Python, Kotlin, Node.js, React, Linux, Raspberry Pi
OTHER	LaTeX, Fusion 360, Git, Firebase

LANGUAGES

German — C2 English — B2 (Cambridge First, 2026)

INTERESTS

Volunteer fire service · American football · Hiking · Analogue and astro photography · Robotics