Florian Pasco

pasco.florian.pro@gmail.com — +33 7 67 64 79 28 — LinkedIn Profile — GitHub Profile — Website — Holder of a Driving licence class B

Embedded Systems engineer (HW & SW)

Results-driven Embedded Systems Engineer with hands-on experience in reverse engineering, PCB design, and firmware development. Adept at designing and debugging embedded solutions, from autonomous robots to Bluetooth audio devices. Strong background in internal component analysis, hardware integration, and microcontroller programming.

Education

École nationale d'ingénieurs de Brest (ENIB) – Brest, France
Master's in Embedded Systems Engineering (Expected Graduation: January 30, 2026)
Specialization in hardware design, RF and firmware development.
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École nationale d'ingénieurs de Brest (ENIB) – Brest, France
Bachelor's in Engineering (Obtained: 2024)
Focused on Embedded Systems and Electronics.

Technical Skills

- Hardware: PCB Reverse Engineering, PCB design, Microcontrollers (STM32, ESP32, ARM Cortex), FPGA (VHDL, Verilog)
- Testing & Debugging: Oscilloscopes, Multimeters, Advanced brazing skills
- Firmware & Software: C, C++, Python, Embedded C, RTOS (FreeRTOS)
- Development Tools: STM32CubeIDE, Git, Jupyter Notebook, ESP-IDF
- Protocols & Interfaces: UART, SPI, I2C, CAN

Professional Experience

Electronics Repair Assistant Engineer (Internship)
Breizelec – Châteaulin, Brittany, France — July 2024 – January 2025 (7 months)
- Diagnosed and repaired 100+ electronic systems for agricultural machinery.
- Study and document the operation of existing electronic boxes.
- Developed reverse-engineering techniques to improve fault detection.

Autonomous Vehicle Electronics Design Technician (Internship)
AgriProTech – Quimperlé, Brittany, France — July 2023 – August 2023 (2 months)
- Integrated ArduPilot firmware for improved vehicle stability.
- Optimized RTK GPS, increasing positioning accuracy.

Projects

BoardMapper | Presentation page

Creating an automated PCB annotation tool to assist reverse engineering and hardware debugging, using image processing with Python and OpenCV.

HV2LV-PowerJST | Presentation page

Designing a compact open-source PCB that efficiently steps down input voltages from 4.8V - 15V to a stable 3.3V output using an AMS1117 voltage regulator, ideal for powering embedded systems and IoT devices.

BatteryLevelIndicator | Presentation page

Designing an open-source board to monitor battery levels with five green LEDs indicating charge status and a red LED for critical low levels. Features include an ON/OFF button and customizable indicators using white and blue LEDs.

Temperature Control System for a Heating Resistor | Presentation page

Designed a PCB integrating thermal sensors and control logic; developed a real-time temperature regulation system using a thermistor.

Languages

- English: Proficient (B2 CEFR)
- French: Native
- German: Basic (A2 CEFR)

Available for an interview at your earliest convenience. Looking forward to discussing how I can contribute to your team.