Matthieu Tremblay

Embedded system engineer

matthieu.tremblay2003@gmail.com
+33 6.18.97.12.21
matthieu-tremblay.com

Embedded systems engineer graduating September 2026, with hands-on experience in C development, V-model methodology, and real-time systems. Seeking a role in critical embedded software within the aerospace industry.

EDUCATION

ESEO Engineering School — General Engineering Degree, Embedded Systems — **Angers, France**
2021 - 2026

Bachelor of Engineering - Embedded Systems Specialization; GPA: 3.7/4.0

Coursework: *Linux OS, Embedded Development (C, Rust), Testing, Formal Modeling, Algorithms, FPGA*

COMPÉTENCES

- **Languages:** C, C++, Python, JavaScript, Java, Bash
- **AI & Modeling:** PyTorch, Scikit-learn, TensorFlow, Formal Modeling
- **V&V:** Robotframework, V-model, Test Plans
- **Platforms & Networks:** Linux, Windows, Arduino, Raspberry Pi, Git/GitLab/GitHub, Embedded Protocols (UART, MQTT, HTTP)

PROFESSIONAL EXPERIENCE

Keywords
JS, SQL — Project Management — Test Plans — V&V

Airbus Atlantic — Digitalization Engineer, Machine Tools | Internship *(March 2026 - Sep. 2026)*

- Autonomous deployment of a real-time data monitoring PoC for industrial machine tools (JS, SQL)
- Requirements definition, development and validation through test plans

Keywords
PyTorch, Scikit-learn — GNN — Agile — Project Lead

Hitachi Hong Kong — AI/ML Developer *(Sep. 2025 - Jan. 2026)*

- Developed a GNN GAT model on 32M travel transactions for fraud detection (PyTorch)
- Led a 4-person team using Agile methodology

Keywords
C — V-model — ISO 29148 — RobotFramework — HTTP

Fortil (French IT consulting firm) — Embedded Software Developer *(Jan. 2025 - Jul. 2025)*

- Specification, design and C development using V-model per ISO/IEC/IEEE 29148, team of 8
- Integration testing and HTTP communications (RobotFramework, C)

Keywords
Analog Electronics — Cross-cultural — Japanese (B1)

University of Electro-Communication — AR Combat Game *(Jul. 2024 - Nov. 2024)*

- Designed an analog filtering test bench for sword detection in Augmented Reality
- Only foreign member of a Japanese development team — final presentation to Japanese clients

PROJECTS

Keywords
C++, Java, Rust — Multithreading — Memory Management (ownership) — AI Inference — STM32, HAL, RTOS, Interrupts, UART

- Human detection pipeline C++ — YoloV8/OpenVINO inference and ESP32 streaming (ongoing)
- STM32 servo-motor C — ultrasonic detection, timer interrupts and RTOS (May 2025)
- Magnetic motor validation — measurement bench, electrical signal analysis (Sep. 2024 – Nov. 2025)
- Java/Rust games — multithreading, state machines, memory ownership (June 2024)

LANGUAGES

- French (native) | English (fluent — TOEIC 850/990) | Japanese (beginner — B1)

INTERESTS

- Calisthenics, travel (Asia, Europe), Japanese language learning