

# MATTHIEU TREMBLAY

Seeking an end-of-studies internship in real-time embedded systems development in aeronautics

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Angers  
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Permis B (véhiculé)

*As an engineering student specializing in embedded systems, I am learning to design safe and efficient systems through the development of unit tests in Java (Mockito, JUnit, Jacoco) for black boxes and white boxes.*

## SKILLS

- Tests :
  - Integration : Robot Framework, Squash
  - Unit : JUnit, Jacoco, Mockito
- Web development : HTML, CSS, Next.js
- Operating system: Linux (basic command)
- Artificial Intelligence : OpenCV, OpenVino, Yocto, Python, GNN
- System design and specification (ISO/IEC/IEEE 29148)
- Programming on communication bus: UART, I2C
- Embedded development: C, C++, Java (bare metal, Raspberry Pi)
- Version control: Git (basic commands)

## SOFT SKILLS

Adaptable, thorough, sociable, team player, curious, organized, creative

## TRAINING

General engineering degree  
ESEO, Angers 2021 - 2026

## LANGUAGES

French  
Native language - Voltaire 822

English : C1  
Fluent - TOEIC 850

Japanese : B1

## INTERESTS

Trips  
Asie - Europe - Amérique

Sport  
Calisthenics - Regular training sessions

Music  
Guitar - Playing for 7 years

## WORK EXPERIENCE

### Embedded System Project

01.2025 (6 months)

C Developer; ESEO, Angers

For projects involving eight people, I created use cases and software architecture and developed a module in C to perform secure HTTP requests to a server. I also conducted integration tests using Robot Framework to validate communication between an Android application and our embedded software.

### Fraud detection using deep learning

09.2025 (ongoing)

Python developer; Hitachi, Hong Kong

Development of a comprehensive fraud detection system using graph neural networks, including tabular data transformation, unsupervised model training, and real-time deployment.

### IT specialist

07.2025 (ongoing)

Freelance Developer; ConciseHealthCare, Los Angeles

Development of an Android application for verifying medical certificates for an American client.

Resolution of SSL certificate issues and deployment of a VPN on the Proxmox infrastructure. UX/UI prototype on Figma and implementation in progress in Java Android.

### Patenting an electric motor

01.2024 (ongoing)

Junior Enterprise speaker; ESEO, Angers

Comparative study of several motors with magnetic secondary circuits combining theoretical modeling and experimental validation. Analysis of performance differences between each motor (drum, discs). Calculations of efficiency and magnetic flux, and creation of a technical document in LaTeX.

### Analog filtering of a game in AR

07.2024 (5 months)

Researcher; Chofu, Tokyo

As the only French member of a Japanese team, I designed a complete active filtering system for two frequency bands, including validation on LTSpice and spectral analysis.

### Student jobs

2021 (5 years)

City of Angers / Esca'l, Angers / MS Châtillon / Hyper-U

My professional experience includes a part-time job as an early morning maintenance worker and a position as an event server with late shifts until 1 a.m. In addition, I was responsible for organizing a two-week trip to Belgium for 12 adults with disabilities. I also worked as a cashier in a student job.