

# Maxence Fromentin

Product Engineer

Paris, France · Relocating to Japan (Jul. 2026)  
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## SUMMARY

Product Engineer and ECE Paris graduate with a hybrid builder/PM profile - I ship code and define product strategy. Skilled in Python, FastAPI, React, and LLM integration, with production-grade projects in AI product development and full-stack architecture. Experienced in Agile delivery, backlog management, and cross-functional stakeholder alignment. Self-studying Japanese (approx. N3, 2+ years), targeting Technical PM, Product Engineer, or AI PM roles in Japan.

## WORK EXPERIENCE

### Rakuten France

Jan. 2026 - Jul. 2026 · Paris

Intern, Product Manager

- Conducted end-to-end conversion funnel analysis on Add to Cart and Refit flows, identifying friction points through user behavior data and producing prioritized recommendations to increase conversion rate
- Owned product roadmap for Cash Back feature evolution - defined requirements, scoped technical dependencies, and drove delivery of Auto Unlock Cash Back at delivery, coordinating engineering, business, and ops stakeholders from discovery to release
- Translated business objectives into user stories, acceptance criteria, and sprint-ready specs; facilitated Agile ceremonies (sprint planning, backlog refinement) across both initiatives

### 4iTEC 4.0 - Stellantis Project

Apr. 2025 - Aug. 2025 · Poissy

Intern, Software Engineer

- Designed and developed a Python HMI (Tkinter) for ADAS washing circuit design, covering end-to-end product development from requirement gathering to deployment
- Automated hydraulic calculation and data visualization pipelines, reducing engineer workload by about 60% and cutting design review cycles from days to hours
- Delivered iterative releases based on user feedback, applying design thinking methods across 3 major versions

### JEECE - Junior Enterprise ECE Paris

Mar. 2025 - Jun. 2025 · Paris

Web Developer (React.js)

- Built and delivered a full React.js website on time within client-defined scope, coordinating design, dev, and client feedback loops in a sprint-based workflow

## PROJECTS

### JapanApp - Full-Stack AI Japanese Learning App

React · Vite · Tailwind · FastAPI · PostgreSQL (Supabase) · Ollama · Docker

Production-grade SRS platform with SM-2 flashcard system, JLPT kanji tracker, AI conversation module, and daily word feature. Designed a 16-table relational schema (ERD), REST API with FastAPI, and integrated local LLM (Ollama) for privacy-first AI tutoring without external API dependency. Built for Japanese learners targeting JLPT certification - domain expertise grounded in 2+ years of personal self-study.

### Gen AI Chatbot

Python · Local LLM (0.5B) · Prompt Engineering

Engineered a lightweight chatbot running on a 0.5B local LLM to provide context-aware responses without relying on external APIs, ensuring privacy and low-latency performance.

### IoT Smart Irrigation System

Vue.js · Python · Raspberry Pi

Raspberry Pi-hosted web app automating irrigation via solenoid valve control, processing real-time data from 15 sensors for efficient monitoring and smart water management.

### Homelab & Home Automation

Docker · Home Assistant (HAOS) · WireGuard · Zigbee · n8n

Self-hosted infrastructure on Raspberry Pi: Docker services, WireGuard VPN for remote access, Zigbee for IoT device management - simulating production DevOps and infrastructure practices.

## EDUCATION

### ECE Paris - Graduate School of Engineering

Sept. 2021 - Jul. 2026

Product Engineering & Innovation (PEI)

UX/UI design · Web & Mobile Dev · Project Management · HMI · Agile methodologies

### NTUST - National Taiwan University of Science & Technology

Aug. 2025 - Jan. 2026

AI Technologies & Business Applications · Advanced Networking · Japanese

### University of Malta

Sept. 2022 - Feb. 2023

NLP & Human-Computer Interaction · Management

## SKILLS

### Programming

Python · JavaScript · TypeScript · SQL · HTML/CSS · C · Java

### Frontend

Next.js · Vue.js · Vite · Tailwind CSS

### Backend & DB

FastAPI · REST API · PostgreSQL · Supabase · MongoDB

### AI & Automation

LLM integration · Prompt engineering · Ollama · n8n · AI pipeline design

### DevOps & Infra

Docker · Git/GitHub · CI/CD · Hosting

### Product & Agile

Design thinking · User centered design · Roadmap · Backlog · User stories

### Tools

Jira · Figma · Notion · Adobe CC

## PROFILE AT A GLANCE

3

COUNTRIES STUDIED AND WORKED IN

2+

YEARS JAPANESE SELF-STUDY

5+

PRODUCTION PROJECTS SHIPPED

~60%

WORKLOAD REDUCTION AT STELLANTIS

## LANGUAGES

### French

Native

### English

Fluent - TOEIC 880

### Japanese

Intermediate (approx. N3)

### Spanish

Basic

## CERTIFICATIONS & ACHIEVEMENTS

### Agile / Scrum - Certified

ECE Paris · 2024

### TOEIC 880 - English Proficiency

C1 equivalent · 2023

### Exchange - NTUST, Taiwan

AI & Business Applications · Mandarin · Japanese · 2025

### Exchange - University of Malta

NLP & HCI · Engineering · 2022

## AREAS OF INTEREST

AI · Product Development · LLM Applications

Machine Learning · Automation · IoT

Workflow Automation · Japanese

Developer Tools · Self-hosted Infra

Open Source

## HOBBIES

Sports: Judo · Skiing · Volleyball · Rowing

Creative: Photography · Guitar

Travel: UK · USA · Japan · Thailand