



# PROFESSIONAL & ACADEMIC EXPERIENCE

## Groupe Seb – Middleware & BSP Developer (2023–2025)

- Bug fixing, feature implementation, and PR reviews on touchscreen products (Touch product line)
- Board flashing and hardware replacement (full product disassembly)
- Designed and implemented a complete scale calibration system (BSP, Middleware, UI)
- Set up automated error reporting with statistics and logs
- Worked in a constrained environment: Java 7, minimal documentation, extensive real-machine testing
- Collaborated with UI/test teams, wrote process documentation, and ensured compliance with strict business constraints

**Java 7, C, MicroEJ, Confluence, Jira, GitHub**

## Internship – CEREMA (2020)

- Video stream analysis for lighthouse tracking in maritime environments
- Extracted light information from YouTube videos, processed and visualized results
- Structured project in Python, adapted to real-world data of varying quality

**Python, OpenCV, PyTube, Matplotlib**

## Autonomous Controller using Fuzzy Logic (2021)

- Developed a fuzzy controller to guide a robot towards a target while avoiding obstacles
- Designed membership functions (distance, direction, speed) and associated fuzzy rules
- Optimized the logic engine (simplification, stability), handled simulator edge cases
- Tested and tuned on a Linux simulator, structured and cross-platform documentation

**Fuzzy Logic (Java), custom fuzzy engine**

## Combinatorial Optimization – Evolutionary Algorithm (2021)

- Implemented a genetic algorithm inspired by the immune system to solve the TSP
- Compared mutation strategies, tuned parameters (population size, generations, mutation rate)
- Analyzed performance: convergence, solution quality, execution time
- Created graphical visualizations to track evolution and identify best combinations

**Python, genetic algorithms, matplotlib**

## Firearm Detection in Images (2021)

- Trained a supervised model (scikit-learn) to identify the presence of firearms
- Processed images with OpenCV, visualized detection results

**Python, OpenCV, Scikit-learn**

## Parallel Convex Hull Computation (2021)

- Implemented a “divide and conquer” algorithm in C for convex hull computation
- Designed a master/slave architecture with PVM, serialization and merging of complex structures
- Analyzed parallelism limitations and proposed a hierarchical merging approach

**C, PVM, Linux**

## Personal Project – Self-hosted Multimedia Platform (2020 – Present)

- Deployed Jellyfin, Organizr using Docker
- Configured reverse proxy with Nginx, IPv6/IPv4 redirection via Cloudflare, orchestration with Portainer
- Optimized storage with MergeFS, automated tasks with Crontab
- Ensured security, network configuration, and system management on Linux

**Docker, Nginx, Portainer, Cloudflare, MergeFS, Crontab**

## E-sports Tournament Organization (GG-Lan – 2018 – Present)

- Built and managed Linux servers for hosting Counter-Strike tournaments
- Deployed services with Docker, handled network configuration and real-time administration during matches
- Managed teams, registrations, and resolved technical issues under pressure

**Docker, Linux, network management, Counter-Strike**

# SKILLS

## Programming Languages

Java, C, Python (SkLearn), Golang, Bash, XML, PHP

## Web Frameworks & Tools

Laravel, CodeIgniter, Bootstrap

## Databases

SQL (MySQL, H2)

## Project Management

Git, GitHub, GitLab, Jira, Confluence, Teams, UML, Agile

## System Tools

Docker, Portainer, MergeFS, Crontab, Cloudflare, SSH

## Technical Libraries

MicroEJ, PVM, ncurses

## Soft skills

Resilience, calm under pressure, independence

# Maxime YONNET

Software Engineer specialized in  
Embedded Systems & AI

## PROFILE

Embedded software developer,  
Independent and curious, comfortable  
with Linux and low-level programming.

## CONTACT

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## EDUCATION

### Master's Degree (2020 – 2022) – UBO, ENIB, IMT

Specialization in Intelligent, Interactive and Autonomous Systems.

### Bachelor's Degree, Year 3 (2019 – 2020) – UBO

Specialization in Computer Engineering.

### University Diploma of Technology (DUT) (2017 – 2019) – IUT of Laval

Final semester completed at Cégep de Matane, Canada.

## OTHER

**Languages:** English (Fluent), Spanish (Intermediate/Conversational)

**International Experience:** Canada, Brazil, Paraguay (cultural immersion)

**Linux:** Daily use (terminal, scripting, local deployment)

**Remote Work:** All professional experiences listed here were carried out fully remotely