

Lucien HERVÉ

EDUCATION

Master of Engineering in Computer Science

Sep 2024 – Present

IMT Atlantique – Rennes, France

Computer Science, Networking and Telecommunications · Apprenticeship program

Bachelor of Science in Computer Science

Sep 2021 – Sep 2024

IUT of Lannion – Lannion, France

Software Design and Development, Project Management · Apprenticeship program

EXPERIENCE

Software Engineering Apprentice

Aug 2023 – Present

EXAIL (formerly iXblue) – Lannion, France

- Technical referent for fiber optic production applications used by manufacturing and R&D teams
- Designing FiberNet, a unified production management platform replacing three legacy applications (Symfony, PostgreSQL, Docker)
- Migrated the team from SVN to Git, set up CI/CD with Jenkins, wrote deployment procedures and user documentation
- Implemented structured logging and automated tests to reduce production incidents
- Work with production, R&D, and sales teams to build custom tooling for specialty fiber optic components

Embedded Systems Intern

Apr 2023 – Jul 2023

HEOL DESIGN (Client: Ariane Group) – Lannion, France

- Built the software layer for an aerospace time server integrating BeagleBone Black with FPGA and rubidium clock hardware
- Created a minimal embedded Linux OS with Buildroot, optimized for eMMC flash
- Wrote serial protocol to communicate with FPGA, plus a PHP web panel for configuration
- Implemented NMEA parser for GNSS time synchronization
- Full-stack embedded work: C, Python, PHP, Bash

PROJECTS

Homelab & Privacy Infrastructure – Proxmox, Docker, Podman, Caddy, WireGuard

- Run a multi-node setup: Proxmox homelab on Mini PC (N100) and a VPS in Germany for storage and media
- Migrated from HP ProLiant server (Unraid/TrueNAS) to quieter, low-power hardware
- Self-host privacy-focused services: AdGuard (DNS), Paperless-ngx (documents), SearXNG (search), PocketID (SSO/OIDC)
- Media and productivity stack: Jellyfin, Immich, Forgejo, Syncthing, SiYuan, Booklore
- Tested multiple reverse proxy solutions (Nginx Proxy Manager, Traefik, Pangolin) before settling on Caddy
- Network secured with WireGuard VPN, with Tailscale as fallback for restricted networks

Association Management Platform – Django, PostgreSQL

- Web app for a non-profit to manage members, activities, and generate invoices automatically
- Custom invoice generation based on member participation in activities
- Self-hosted and maintained on personal infrastructure

Portfolio & E-commerce Site — *Node.js, SQLite, HTML/CSS*

- Built a portfolio website with integrated e-shop for a family member
- Admin panel for product and content management
- Lightweight backend with Node.js and SQLite for simplicity

Generative Art Engine — *JavaScript, Canvas API, p5.js*

- Interactive particle system with physics simulation (gravity, collisions, lighting effects)
- Started in vanilla JavaScript, migrated to p5.js for easier canvas manipulation
- Part of a creative coding webring with friends

LANGUAGE

- **French:** Native, professional proficiency
- **English:** Fluent, Cambridge Certified (B2 level)
- **Spanish:** Elementary proficiency

TECHNICAL SKILLS

Languages: C/C++, Java, Python, PHP, JavaScript/TypeScript

Web: Symfony, Django, React, Node.js, HTML/CSS

Infrastructure: Linux, Docker, Podman, Proxmox, Kubernetes, Jenkins, Git, Buildroot

Automation: n8n, Home Assistant

Databases: PostgreSQL, MySQL, SQLite, MongoDB, Elasticsearch, Cassandra

Embedded: Arduino, ESP32, Raspberry Pi, BeagleBone

Networking: TCP/IP, WireGuard, Tailscale, SSH, VoIP, Caddy, Traefik