

LEGE HUGO

SEEKING A FINAL-YEAR INTERNSHIP IN EMBEDDED SYSTEMS

legehugo@gmail.com | +33 7 81 12 75 76 | github.com/HxgoL | [PorteFolio](#) | LinkedIn : [LEGE Hugo](#)

PROFILE

Third-year engineering student specialising in embedded systems, seeking a four-to-six-month final-year internship starting in January 2027.

KEY PROJECTS AND RELATED SKILLS

LC-3 Processor Architecture Project: Designed and validated a processor architecture, including its datapath and control unit. Worked on instruction-set management, registers, the arithmetic logic unit, memory organisation, and low-level programming in LC-3 assembly language.

TCP Messaging Application in C: Developed a TCP-based messaging application using C, network programming, sockets, and low-level system architecture. Worked in Linux/UNIX and POSIX environments, with concurrent processes, multithreading, pthreads, synchronisation, and deadlock management.

Hackathon – AI Copilot for the Insurance Industry (AGRICA): Developed an AI-powered assistant using Python. Integrated Claude via the Anthropic API with structured JSON parsing. Implemented PDF extraction, privacy-by-design (PII minimisation and anonymisation), logging, and automated testing.

TECHNICAL SKILLS

- Languages : French (Native), English (C1)
- Programming : C, Python, Java, C++, Linux/UNIX, POSIX
- IA: NumPy, Pandas, Python, PyTorch, OpenCV, vision par ordinateur, Deep Learning, CNN, détection d'objets (YOLO), entraînement et évaluation de modèles
- Tools : Git/GitHub, KiCad, LTSpice, MATLAB/Octave, Docker, Jenkins

EDUCATION

- **PCSO-Orsay** : Préparation au Coursus Scientifique d'Orsay – Université Paris-Saclay 2020
- **Bachelor's Degree in Mathematics:** Université de Créteil 2020 - 2024
- **École D'ingénieur Denis-Diderot** : Engineering Degree in Embedded Systems 2024-2027

PROFESSIONAL EXPERIENCE

- **Research intern:** Detecting and Mitigating Carpet-Bombing DDoS Attacks
Mai 2026 – Juillet 2026 | LIPADE Paris
Designed and implemented a simulated network testing environment. Generated network traffic, analysed network flows, implemented attack mitigation mechanisms, and evaluated their performance.
- **Mathematics Teacher – Pre-Professional Teaching Assistant Programme**
Sep 2022 – Sep 2024 | Dulcie-September Arcueil
Prepared and delivered mathematics lessons to middle-school students. Monitored students' academic progress, communicated regularly with parents, and collaborated with the teaching team.
- **Leroy Merlin Seasonal Sales Advisor – Garden Department**

INTERESTS

Sports, music and guitar playing. Interested in literature, philosophy, sociology, technology, current affairs, and finance.