

Cédric Chanfreau

Software Engineer

+(33) 679 791 782

France, Toulouse

cedric.chanfreau@gmail.com

<https://www.linkedin.com/in/cedricchanfreau>

SUMMARY

Highly motivated recent graduate with a master's degree in Automation and Electrical Computer Engineering. Specialized in IoT, embedded systems, and software development, with hands-on experience in international environments. Actively seeking opportunities in the United States to leverage my technical expertise and teamwork skills in innovative projects.

TECHNICAL SKILLS

- **Programming & Embedded Systems:** C, Python, Java, C++, Assembly, VHDL, PLC (Ladder, ST, FBD).
- **Software & Tools:** Eclipse, Keil, Docker, VirtualBox, OpenStack, SolidWorks, Proteus, Altium, Git.
- **Communication & APIs:** RESTful APIs, MQTT, OM2M, CAN Bus, SPI, I2C.
- **Frontend & Visualization:** HTML, CSS, JavaScript, Node-RED, React Native.
- **Languages:** French (native), English (advanced), Spanish (intermediate).

EDUCATION

2024 - 2025: Master 2 (M2) in Embedded Networks and Connected Objects (REOC)

ENSEEIHT, Toulouse

- Specialized in IoT systems: communication technologies, data processing, and network security.
- Developed a software-defined communication infrastructure (SDCI) for managing and controlling network traffic using Docker and REST APIs.

2022 - 2025: Master's degree in Automation and Electrical Engineering

National Institute of Applied Sciences (INSA), Toulouse

- Key areas: Embedded Systems, Machine Learning, Computer Security, and Electronic Circuit Design.
- Designed and developed a gas sensor: component creation, electronic board design and programming, mobile app and website development, MQTT integration, Node-RED dashboard, and datasheet creation.

PROFESSIONAL EXPERIENCE

International Engineering Mobility - Vitesco Technologies Romania

Jul 2024 - Sep 2024

- Studied and implemented Flash memory management solutions on new microcontrollers.
- Created the environment to automate and optimize tests, using Python and CMM scripts.

Embedded Software Engineer apprenticeship - Vitesco Technologies France

Sep 2022 - Sep 2025

- Developed embedded solutions for ECU reprogramming and ensured code quality (MISRA, CERT).
- Tested and debugged code to ensure proper operation and problem resolution.
- Presented regular project reviews to team members in English.

EXTRACURRICULUM ACTIVITIES

- **Rugby Player:** Scrum-half since 2007 at Federal 1 level. Achieved 3rd place in French championships.
- **Volunteering:** Assessor of a polling station for the regional and departmental elections.
- **Independent Travel:** Explored destinations across Europe (Italy, England, Spain, etc.) and beyond, gaining diverse cultural insights.