Cédric Chanfreau

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I am a highly motivated master’s student in apprenticeship studying Automation and Electrical Engineering looking for a permanent contract in the field of software development. I have great teamwork skills and work in a goal-orientated manner. I have acquired much practical and technical knowledge on programming and electronic systems that I would like to apply and develop in your company.

**Education**

**2022-2025 - Master’s degree in Automation and Electrical Engineering, National Institute of Applied Sciences, Toulouse**

* Computer Science and Security: Embedded Systems Architectures, Computer Security, Object-Oriented Design
* Automation: Multivariable Systems, Optimal Control, Machine Learning and Petri Nets
* Electronic Circuit Design: Digital Acquisition, Control Chains and Signal Processing
* Project: Designed, programmed and created an electronic board for the 60th anniversary of INSA in a team

**2020-2022 - University Diploma in Electrical Engineering and Industrial Computing, University Institute of Technology, Toulouse**

* Electrical Engineering: Hyper-frequencies, Telecommunication, Propagation
* Fundamentals of Electricity: Electromagnetism, Linear Circuits in Periodic and Transient States
* Project: Designed and coded a game in C
* Equivalent to High School Diploma in Science and Engineering Science

**2018-2020 - Scientific baccalaureate (option Engineering Science), Stephane Hessel Lycée, Toulouse**

**Technical**

* Design and assembly of electronic cards
* Debugging tools and software security testing
* Familiarity with the concept of microcontroller memory
* Linguistic: French native language

- English intermediate level

- Spanish intermediate level

**Programming / Software**

* Language in digital electronics: VHDL (Quartus)
* Microprocessor language: C, C++, Assembly (Keil)
* Programming language: Java, Python, Git (Eclipse, VS Code)
* PLC language: Ladder, ST, FBD (TIA Portals)
* Computer aided design: SolidWorks, Proteus, Altium
* Computer science: MS Office

**Skills**

**Work experience**

**International Engineering Mobility** – Vitesco Technologies (July 2024 - September 2024):

* Studied and implemented solutions for Flash memory management on a new microcontroller
* Tested and validated Flash functionalities to ensure reliability of the new platform.
* Created the environment to automate and optimize tests, using Python and CMM scripts.

**Embedded Software Engineer apprenticeship** - Vitesco Technologies (September 2022 - August 2025):

* Developed generic embedded solutions for ECUs reprogramming.
* Tested and debugged code to ensure proper operation and problem resolution
* Corrected the code according to MISRA and CERT standards to ensure the security and quality of the software.
* Presented regular project reviews to team members in English

**Electronic method technician internship** - Siemens Mobility (April - July 2022):

* Studied the VAL208NG brake rack system and developed a test solution
* Conducted functional tests on the brake rack cards to ensure optimal performance

**Extracurriculum activities**

* Practiced swimming for 6 years in a club.
* Played rugby since 2007 as a scrum half / winger at a high competitive level (Federal 1 league) and achieving a notable 3rd place in the French championship.
* Assessor of a polling station for the regional and departmental elections
* Independent travel in Europe (Italy, Ireland, Holland)