Gaetan CANTELOBRE

07 83 09 74 25 · github.com/gaetancantelobre · gaetancantelobre@gmail.com · French/American
Bordeaux (33) · **Master's in Embedded Software Developement @ Université de Bordeaux**

EMBEDDED SOFTWARE ENGINEER

As a recent graduate in embedded development, eager to learn and contribute, I am seeking my first professional opportunity as a Junior Embedded Enigneer. Open to work starting October 2025.

PROFESSIONAL EXPERIENCES :

EMBEDDED/REAL-TIME DEVELOPER | THALES SIX GTS | 6 MONTHS

APRIL - SEPTEMBER 2025 | MASTER'S INTERNSHIP

Timing Driver Development & Integration:

- Designed, developed, and integrated a critical timing driver for military tactical radio test systems using C++ & Python.

System Test Acceleration :

- Streamlined the system testing process by integrating the newly developed timing driver, resulting in best possible execution time, faster test cycles, increased test throughput.

Debugging Tool Reintegration & Efficiency:

- Reintegrated and optimized essential debugging tools and procedures within the test development environment, significantly improving diagnostic capabilities and reducing troubleshooting time for embedded systems.

Technologies : C++, Python, RTOS, embedded systems.

MECHATRONIC DEVELOPER (C++ , ROS) | 2 MONTHS

CHANTIER NAVAL COUACH | JULY - AUGUST 2023

- Engineered bearing adjustment system for nautical drone using a PID-controlled angle calculation algorithms using C++.
- Reverse-engineered CAN bus protocols through packet sniffing analysis, enabling integration of legacy marine sensors.
- Developed sensor calibration tools that improved overall measurement accuracy with legacy sensors.
- Created a ROS-based communication protocols for seamless CAN bus integration.

Technologies : C++, ROS, CAN bus protocols, embedded systems, marine electronics.

SKILLS :

- Programming (C++,C, Python)
- Competent with Git
- Fluent English (C1+ LinguaSkill).
- Electronics & PCB design (KICAD)
- Linux, Docker
- RTOS

PERSONAL PROJECTS :

ESP32-C3-H4X DEV BOARD DESIGN

- Designed and produced a compact breakout board for the ESP32-C3-H4X microcontroller.
- Designed via KICAD & developed embedded firmware in C/C++ using the ESP-IDF framework
- Documented design decisions, schematics, and code in a GitHub repository to enable reproducibility and collaboration.

CUSTOM KEYBOARDS PRODUCTION

- Designed custom keyboard PCB's.
- Custom cases designed for each keyboard

SHOOTING LEVEL INDICATOR

- STM8 and TI LSM6DSLTR based electronic level including built-In BMS.
- Small footprint designed to be attached to Picatinny Rails.
- High frequency detection and feedback for competitve shooters.

LONG RANGE SUB 100G DELTA WINGS

- Designed for minimal weight.
- Custom RP2040 gyrostabalised flight controller compatible supporting ELRS.
- 58 minute flight time.

RC AND PILOTING EXPERIENCE

- Flying & buidling FPV quadcopters since 2015.
- Light Aircraft Pilot License (Brevet de Base)

RP2040 BASED FLIGHT CONTROLLER

- TI LSM6DSLTR gyro + accelerometer.
- INAV, ARDUPILOT and BETAFLIGHT compatible.
- GNSS compatible UART.
- Waypoint + payload missions.

MORE PROJECTS ON MY LINKEDIN :