Marc Robison

- 23 years old
- marcrobison.com
- marc@marcrobison.com
- github.com/themarcman314
- linkedin.com/in/marc-robison/

- One year of experience in **firmware development**
- Bachelors degree in Electronics engineering specialised in **Embedded systems**.

Education 🏛

- 2024 - 2027 — **Masters in Embedded Systems and Telecommunications engineering -** *INSA Hauts-de-France.*
- 2021 - 2024 — **Bachelors degree in Electrical engineering and Industrial Computing (GEII) -** *IUT de Montpellier.*
- 2019 - 2021 — **Engineering preparatory cycle : CPGE PTSI -** *Lycée Louis de Cormontaigne, Metz.*
- 2019 — **High school graduation in Science (with honors) -** *Lycée Français de Barcelone* - specialised in physics and chemistry.

Languages : Quadrilingual 📖

- **English**: 975/990 toeic (American citizenship),
- **Spanish** (Spanish citizenship),
- **Catalan**: C1,
- **French**: C1,
- German : Beginner

Summer programs ☀

- **Physics of Atomic Nuclei (PAN) -** Michigan State University, USA.
- **Wearable electronics-** Georgia Tech, USA.

Work experience 💼

Work study program in firmware development for STM32 MCU — Ampère-emob — March 2023 - June 2024

- IOT : MQTTS client (FreeRTOS + LWIP + MbedTLS) on STM32 and GNU/Linux broker.
- MID certified power measurements (analog HAL effect sensor).
- SQL database.
- OTA updates.
- WS2812 STM32 HAL library.
- SPI diferential current sensor readings.

Group leader and camp counselor (UK and Canada) — Go&Live Group, France — July and August 2022

Teacher's assistant — Atlanta International School, USA — July 2015 - 2019

Skills 🔧

Technical

Programming </> — C, python, C++, VHDL.
Networking — TCP, NMAP, MQTT, TLS/SSL, I2C, SPI, CAN.
GNU/Linux — Experience with Debian for server administration. I use Artix Linux on my main machine. I have experience managing my own debian VPS.
Simulation — Testbench (VHDL), Qucs, LTSpice, Matlab, Scilab, Maxima, NI Labview.
CAD — KiCad, Fusion360.
Markup — LaTeX, HTML, CSS.
Other computer skills — git, vim, search engine operators, OSINT, gimp, imagemagick.
PLC programming — Grafcet, Ladder.

Projects 🔳

Air quality mesurement system — Communication via an nRF24L01 module, battery powered with boost converter. Information is then transfered to a computer via serial (UART and USB) and stored in a database : c++ programming with the qt framework. Dashboard data display with Grafana.

Conversion of regular bicycle into combustion engine powered bicycle — Powered from 12V battery and buck converter. HAL effect sensor for detection of motor position and gasoline injection.

Drawer alarm — Active piezzoelectric buzzer controlled by STM32 cortex M0+ and UV sensor threshold.

Custom capacitive touch sensor — CTMU inspired capacitive touch sensor. STM32 SAR-ADC measurement of voltage level. LM317 used as uA current source for capacitive charging.

Sports Basketball, Calisthenics, Gym.

Interpersonal skills Desire to help others. Ability to adapt and eagerness to learn.

Artistic ability Played piano at the conservatory of Barcelona for 4 years.