

# Marc Robison

- 📅 23 years old
- 🌐 marcrobison.com
- ✉️ marc.robison@ampere-emob.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 — **3rd year of 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 📄

**Anglais** (American citizenship), **Espagnol** (Spanish citizenship), **Catalan** : C1, **Français** : C1.

## 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

## Sills 🛠️

### Technical

**Programming** 📄 — C, 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** — L<sup>A</sup>T<sub>E</sub>X, HTML, CSS.

**Other computer skills** — 📄, 📄, 📄, 📄, 📄, 📄, search engine operators, OSINT.

**PLC programming** — Grafcet, Ladder.

### Projects 📄

**Air quality mesurement system** — Communication via an nRF24L01 module, battery powered with boost converter. Information is then transferred 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 piezoelectric 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.