

Clément RØBLØT

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Born the 03/03/1991



I am passionate about computer science and electronics since I am 12. Now I specialized in backend software (embedded C ; C++/QT ; python), but front end can also be fun (angular). Constantly picking up new skills by myself, ideas always pop up in my mind. Friendly and reliable I will always prefer to build a script than do twice the same thing by hand.



Work Experience

Analog Way

Oct 2014

Sep 2017

(France)

Software developer :

- Developed the evolutions (bug correction in preexisting code base and development of new features) of the livecore video switcher/mixer platform (**C on ARM M3**) [4K video, custom output formats, areas of interests, automatic image splitting in multi output screens, output mapping in screens, etc...].
- Designed an EDID (256 bytes memory inside displays) editor using **QT** (available here). This software have since been used and recommended by many industry leaders.
- Improved an internal control, debug and analysis tool in **C#** used on all the analog way products (stabilization of existing application and development of new features).
- Implementation of an internal versioning server now used for all the R&D projects (**gitlab** on a **debian** server).

MAVlab

Mar-Aug 2014

(Netherlands)

- Implemented the paparazzi autopilot on an ornithopter (flapping drone).
- Improved an ESC for inconsistent load systems like flapping robots.
- Built the **first ornithopter capable of flying fully autonomously outside**.

Emulsar

Jun-Aug 2012

(France)

- Engineered an application dedicated to measuring the thickness of emulsions (image processing using **opencv** under **QT**).
- Developed a modular control system based on **microcontroller elements for scheduling chemicals experiments** automatically.

NVT

May-Aug 2011

(France)

- Developed multiple applications dedicated to data processing, motor control and image processing using **labview**.
- Did a test campaign in a railway environment needing data acquisition and sensor maintenance.



Education and Qualifications

The Family
2016

Lion 8 weeks to excel in a startup, from the first day. For employees who want to adapt to this environment.

Rennes 1
2013-2014

Master 2 SISEA as a double degree in **embedded systems** oriented towards research and development.

ENSSAT
(France)
2011-2014

3 years student majoring in **Electronics and Industrial Computer Science** in a selective 3-year postgraduate **engineering** program in Lannion, France. Equivalent to a US Master's Degree in engineering.

IUT (France)
2009-2011

Completed a two-year degree (DUT) in **Electronics and Industrial Computer Science** in Cachan, France. Equivalent to an HND in the UK.



Technical Abilities

| | | | | | | |
|--|---|-------|--------|-------|-------------------|-------|
| Languages | C | ★★★★★ | python | ★★★★★ | Web (HTML/JS/CSS) | ★★★★★ |
| | C++/QT | ★★★★★ | django | ★★★★★ | Angular | ★★★★★ |
| | bash | ★★★★★ | C# | ★★★★★ | PHP (MYSQL) | ★★★★★ |
| beginner ★★★★★ 1 st projects ★★★★★ fluent ★★★★★ accomplished ★★★★★ proficient ★★★★★ | | | | | | |
| OS | Ubuntu (since 8.04), Debian (since 5.0), Ångström. | | | | | |
| Platforms | PIC (16f, 18f, 30f), Psoc (1 and 3), NXP LPC17 (ARM cortex M3), ATMEL V71 (ARM cortex M7), cubieboard (ARM cortex A8), beagleboard (ARM cortex A8). | | | | | |
| Protocols | UART, I2C, SPI, CAN, CAN-FD, UDP | | | | | |



Technical Projects

| | | |
|-----------|--|------------------------------------|
| 2017 | Developed a website dedicated to counting the life span of user reminding them to use to use those days well, and in a meaning-full manner. | Django/JQuery |
| 2016 | Developed a low power tactile button powered by the pull up it controls. | Electronic board |
| 2015-2016 | Developed a website for building random exams in order to limit cheating | (Django/angular) |
| 2015 | Developed an application for automatically downloading a feed of videos (full buffering for slow internet connections) | localtube.org (C++ / QT) |
| 2013-2014 | Creating a system for redundant self-hosting in order to provide the technical capabilities for everyone not to rely on the web giants | lamamos.org (bash/perl/angular) |
| 2012 | Constructed a 3D printer , and learning of the basics of mechanics through small improvements of the machine | mechanic + use of soliworks |
| 2010-2011 | Developed a robot's image processing system to detect and localize pieces of the game for the 2011 Eurobot cup | Opencv, beagleboard |
| 2010-2011 | Implemented a Bluetooth interface for debugging and controlling a robot for the 2011 Eurobot cup | C++ / QT |
| 2009-2010 | Designed a line-following robot for a national contest | Electronic board and embedded C |



Languages

French : Native speaker

English : spoken and written (CLES B2)



Interests

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|------------------|---|
| Electronics | Was member of a robotic association for 3 years. I develop also personal projects, for example a home-made NAS. |
| Computer Science | Development of personal projects like a modular home page generator, or a home-server easy to use by everyone. |
| Learning | Mainly through books and conferences. Lately I spend too much time at The Family in Paris. |
| Climbing | Practiced for 9 years, with the ability to mentor groups. |