

Thomas Venriès

Linux Systems and Software Engineer
Freelancer (CII approved)

Location: Paris/France

+33 (0)6.63.14.33.34

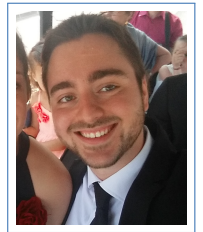
✉ thomas@cryd.io

🐙 Github

in LinkedIn

✳ Malt

French: native



Education

2017 **Master's degree in Computer Engineering, Embedded Systems Speciality**, EPITA, France.

2015 **Advanced English courses**, The Linguaviva Centre, Ireland.

2013 **International semester, Computer Science**, UQAC, Canada.

Professional Experiences

2019 **Software Engineer, Freelancer, CII approved**, France.

(9 months) Most of my missions are in France with some short-term international missions.

- Ordissimo: Porting the Linux kernel on personal computer prototypes **[C, Buildroot]**

- Parifex: kernel driver and software developments for radar prototypes **[C, Debian, CI, Robot Framework]**

2017-2019 **Software Engineer, Smile**, France.

(1 year 3 months)

- Thales C&S: Hardness improvements on CYBELS **[C++, Bash, Python, Robot Framework, Jenkins]**
- Softbank Robotics: Synchronize the system updating and data erasing processes between two USB/Serial-connected boards under Android and GNU/Linux, using AOSP internals **[C, AOSP, Fastboot, Jenkins]**

- Parifex: U-boot, GPIO drivers, Kernel debugging **[C, Bash, Kernel, Robot Framework, Hardware]**

2017 **Embedded Software Engineer (intern)**, Safran Electronics & Defense, France.

(7 months) Writing technical documentation on how to implement a board (SoC and its internals) emulation using the QEMU's API. The mission included Linux kernel debugging, cross-compilation and open-source contributions. **[C, ARM Assembly, Bash]**

2013, 2014 **Software Developer (intern)**, REEDS International Center, France.

(7 months) Serious Game Development running as 3D web application. Collaboration with researchers, PhD and engineers in an international laboratory. End-to-end project experience (V-cycle). **[Unity3D/WebGL, R, PHP]**

Projects

C/C++, ARM **Embedded Software Development**, EPITA.

Assembly Bare metal and high-level development on STM32, Beaglebone, Intel Galileo and Raspberry-Pi. Management of several sensors and wireless modules through USB/Serial, GPIO and I2C. Yocto and FreeRTOS introduction

(4 months) **C, Python 42sh**, EPITA.

(1 month) POSIX compliant Shell implementation which replicates the SCL functionalities

C Wait-free Queue Implementation, EPITA.

(1 month) Based on: C. Yang and J. Mellor-Crummey, Article N°16, NY, USA, 2016. ACM. doi: 10.1145/3016078.2851168

C, x86 Assembly **Fix Missings in STOS Kernel**, EPITA.

(1 month) GDT/IDT initialization, interrupts and pagination management, PIT

C, OCaml Others, EPITA.

(5 months) Reverse engineering of an USB device using Wireshark on Windows and development of its Linux kernel module. Written some C tools and libs (mymalloc using Buddy allocation, libstring, partial libstdio, mymake, mycat, myreadiso, myhttpd and so on), OCR in OCaml

Languages

English Full professional proficiency, TOEIC: 870

Portuguese Elementary

Skills

Programming Programming: C/C++, Bash, Python, Rust

System Linux Kernel development: module drivers, kernel debugging, Qemu

Embedded Buildroot, U-Boot, ARM baremetal, crosstool-NG, I2C/USB/GPIO hardware debugging

C.I./C.D Experience with continuous integration solutions (Jenkins, Robot Framework, GTests)

P.M Experience with project management and its tools: agile/scrum, v-cycle, Gitlab, Jira, Redmine

Cloud Experience with virtualization environments (Qemu, Docker/LXC, Proxmox, NixOS)

Doc Experience with software documentation (Pandoc, Sphinx, Latex)

General Capable of self-training and monitoring of backend-oriented technologies, open source lover

Teamwork Great integration in team (international one as well), experience with remote working

Volunteer Donor for FOSDEM, Framasoft, Mozilla Foundation and Cloud Imperium Games