Thomas Venriès

Linux Systems and Software Engineer
Freelancer (+ CII approved)

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Education

2017 **Engineer's Degree, Real Time and Embedded Systems Speciality**, *EPITA*, France.

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

2013 **International Semester, Major in Computer Science Engineering**, *EPITA/UQAC*, Canada.

2011 **High School Diploma (Sciences/Spe. Math)**, *Lycée Bossuet*, France.

Professional Experiences

2019 (9 mois) **Linux Systems and Software Engineer**, *Freelancer with CII*, France.
- Ordissimo : kernel/driver development, C, Buildroot (6 months)
- Parifex : U-Boot and kernel debugging, kernel driver development, CI (3 months)
- Mentor : QEMU audit (2 weeks)

2017-2019 (1.4 year) **Software Engineer**, *Smile*, France.
- 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 **[AOSP, C, Jenkins]**
- Parifex: U-boot, GPIO drivers, Kernel debugging **[Kernel, C, Bash, Robot Framework, Hardware]**

2017 (7 months) **Embedded Software Engineer (intern)**, *Safran Electronics & Defense*, France.
Written technical documentation on how to implement a board (SoC and its internals) emulation using the QEMU's API. Kernel debugging, cross-compilation and open-source contributions. **[C, ARM Assembly, Bash]**

2013, 2014 (7 months) **Software Developer (intern)**, *REEDS International Center*, France.
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 Assembly (4 months) **Embedded Software Development**, *EPITA*.
Bare metal and 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

C, Python (1 month) **42sh**, *EPITA*.
POSIX compliant Shell implementation which replicates the SCL functionalities

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

C, x86 Assembly (1 month) **Fix Missings in STOS Kernel**, *EPITA*.
GDT/IDT initialization, interrupts and pagination management, PIT

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

Languages

French Native

English Full professional proficiency, TOEIC: 870

Computer skills

Programming C/C++, Python, POSIX Shell, Rust

Testing gcov, gprof, gtest, gdb, [fsl]trace, valgrind, qemu

CI/CD Jenkins, Robot Framework, Sonarqube, Docker

Proj.Management Gitlab, Jira, Redmine, homemade Agile, Scrum & V-Cycle

Documentation LaTeX, Pandoc, Sphinx, Doxygen, Microsoft Office Suite

Open Source QEMU contribution, AUR, personal projects, FOSS lover

Social Great integration in team, satisfaction with a job well done

Hobbies Cooking, Cinema, Manga, Piano, Travels, Stand-up Jet Ski, Boxing, Hiking