

- Embedded Software Engineer, GNU/Linux Programmer -

Free Software related activities

- [Official maintainer of the Google Pixel 4a, Pixel 4a 5G and Pixel 5 devices at Evolution X Android custom ROM project.](#)
- Past hobbyist contributor to the Linux kernel and [OpenEmbedded](#) projects.
On my spare time I wrote device drivers for the [Ben NanoNote](#) and [GCW-Zero](#) hand-held devices, and I also helped maintaining the Linux kernel for those devices, as a member of the Qi-Hardware and GCW Free Software communities.
Moreover, I fixed and maintained the [JLime](#) distribution, and I also maintained the BSP for the Ben NanoNote. My patches can be found in the upstream Linux kernel and OpenEmbedded source trees at <https://git.kernel.org/cgit/linux/kernel/git/torvalds/linux.git/log/?qt=grep&q=apelete>, <http://git.openembedded.org/openembedded/log/?qt=grep&q=apelete>, <http://git.openembedded.org/meta-handheld/log/?qt=grep&q=apelete>.

Personal interests

- As an embedded & system software engineer, I own and run a services company called Missene: <https://www.missene.com>.
- Regular practice of Taichi martial art, 2nd Duan level Instructor in Yang style Tung family form. Related awards: Gold medal during France Chinese Martial Arts Championship 2019.

Work experience

Since Nov. 2025 **EPITA School Of Engineering And Computer Science**
Training Consultant For Bachelor Of Science

- Teaching beginner and advanced Git version control courses to Bachelor of Science students.
Keywords: Teaching, Writing course materials, Knowledge assessment exams, Git VCS

Since June 2025 **Evolution X**
Embedded Android Engineer, Official Maintainer

- As an official maintainer in the Evolution X Android custom ROM project, I adapted and ported Android 15 and Android 16 to the Google Pixel 4a, Pixel 4a 5G and Pixel 5. These devices no longer receive software updates from Google and were left on Android 13 : I fixed whatever was necessary at the system level for these smartphones to run the latest Android version, thus becoming their official maintainer within the Evolution X project.
Keywords: Android, AOSP system development, Custom ROM adaptation

Jul. 2024 to
Feb. 2025 **CS Group**
Embedded Linux Engineer, Self-Employed Contractor

- Fixing Linux kernel bugs and implementing security measures for MCO (“Maintien en Condition Opérationnelle”) and MCS (“Maintien en Condition de Sécurité”) activities in a Gentoo custom distribution.
Keywords: Gentoo packaging, C, Shell Script, Linux Device Drivers.

Oct. 2023 to
Mar. 2024 **Continental Automotive**
Embedded Linux Engineer, Self-Employed Contractor

- Fixing Linux device tree clock configuration and power consumption issues on Ethernet PHY driver for Qualcomm SA415m automotive chip,
- Implement systemd services to handle UBIFS backup, recovery and integrity check mechanisms.
Keywords: C, Shell Script, PHY Ethernet Linux Device Drivers, SystemD

Mar. 2023 to
Oct. 2023 **BayLibre (Working Remotely from home, Paris area, France)**
Embedded Linux Engineer, Self-Employed Contractor

- Upstreaming Linux device driver changes for Texas Instrument PMIC,
- Upstreaming MATLAB drivers for Analog Devices precision converters.
Keywords: C, Linux Device Drivers, Bootloader

- Oct. 2022 to Mar. 2023 **Oroliia 2S (Paris area, France)**
Linux Software Engineer, Self-Employed Contractor
- Designed and wrote a C++ API to interact with an Atomic Reference Time (ART) computer.
- Keywords:** C++, Atomic Reference Time, Clock Oscillator
- Jul. 2022 to Sept. 2022 **Devialet (Paris area, France)**
Audio DSP Engineer, Self-Employed Contractor
- I ported a cycle counter benchmarking program to x86 CPU for comparisons against audio DSP,
 - Benchmarking of a Bluetooth SBC library on Actions-Semi ATS2835P DSP,
 - Analyzing audio pipeline signals through a logic analyzer for quality assurance.
- Keywords:** CEVA Audio DSP, Benchmarking, Audio Pipeline
- Feb. 2022 to Jul. 2022 **Self-Employed Contractor (Paris area, France)**
Embedded Linux Engineer
- Setting up my company to work as a self-employed software engineer contractor.
- Keywords:** Business Creation, Client Prospecting, Contracting
- Sept. 2019 to Feb. 2022 **Sierra Wireless (Working from home, Paris area, France)**
Staff Software Engineer
- As a member of the Chief Technology Officer team, I worked on the SensorHub project intended to bring an asset tracking device to market, based on Amazon FreeRTOS operating system.
- My responsibilities spanned across :
- porting [EmbeddedRPC](#) communication protocol stack to SensorHub architecture,
 - writing device drivers for STMicro LPS22HB pressure sensor,
 - writing on-board software for factory floor testing and validation,
 - managing a team of four contractors and designing software for Quality Assurance (continuous integration, daily builds, regression testing and validation).
- Keywords:** C, Amazon FreeRTOS, Device Drivers, Continuous Integration.
- Mar. 2017 to Sept. 2019 **Sierra Wireless (Paris area, France)**
Senior Software Engineer
- Worked on ALSA audio issues in [Legato](#) open-source platform for IoT and automotive industry. I also worked on a RTOS port of the Legato platform.
- Keywords:** C, Linux kernel, ALSA, RTOS.
- Oct. 2016 to Feb. 2017 **GoPro (Paris area, France)**
Embedded software engineer
- I worked on a development tool to provide automated testing capabilities for the Hero cameras. The tool was built in two parts: a service embedded into the camera that emits data related to its operation, and a graphical user interface running on a computer displaying the data from the service in a meaningful manner and driving the camera according to specified use-cases.
- Keywords:** C, C++, Javascript, Google Chrome Apps.
- July 2013 to July 2016 **Intel Corporation (Toulouse, France)**
Embedded Linux software engineer, providing services on behalf of Open Wide.
- I worked on the audio hardware bring-up for an Android platform by porting patches, modifying and debugging the Linux kernel ALSA/ASoC subsystem,
 - wrote a daemon that drives hardware and software components in order to provide features such as audio playback/recording and voice calls over Bluetooth on an ARM Cortex-M4 processor. This was commercialized as part of a digital coach embedded into the [Oakley Radar Pace](#) glasses,
 - debugged non-trivial kernel issues and set up profiling tools to tune audio latency on Android. I also worked on the development of a client/server infrastructure to transport voice over LTE through the Android telephony stack, and the development of the Android audio HAL for X86 devices.
- Keywords:** C, C++, FreeRTOS, ARM Cortex-M4, STM32, Linux kernel, ALSA, Android.
- Nov. 2011 to June 2013 **Zodiac Aerospace (Toulouse, France)**
Embedded Linux software engineer, providing services on behalf of Open Wide.
- Wrote a firmware for an Atmel AVR32 micro-controller, enabling hardware peripherals such as I2C temperature sensors, leds, real-time clock, flash memory chip and LCD touch-screen. The micro-controller was embedded into an airplane seat display unit. Also wrote the associated test software driving the micro-controller inputs and outputs.
- Keywords:** C, I2C bus, hardware enablement, flash memory mapping.

Mar. 2011 to **Intel Corporation (Toulouse, France)**
Aug. 2011 *Linux kernel developer intern.*

Maintained a test driver for bluetooth and modem chips for the Linux MeeGo kernel and Android kernel. I also wrote the associated user-space program that drives the above mentioned chips.

Keywords: Linux kernel driver, I2S bus, git.

June 2007 to **Isphers (Paris area, France)**
Aug. 2007 *Linux system administrator intern.*

Built computer networks for small offices and administered Linux workstations and servers.

Keywords: Linux system administration, apache, mySQL, samba, sendmail, ftp, vnc.

Computer and communication skills

Programming languages C, C++, Bourne shell, VHDL, ARM Assembly language (AT91x40)

Version control Git

Debugging GDB, Valgrind, JTAG probe

Misc tools GCC, GNU Make, Bugzilla

Written and spoken languages English: fluent
French: fluent

Education

2011 **Master of Science** in Computer Science at “Université Paul Sabatier” and “ENSEEIH” (Toulouse, France).
Ranked First in a class of 13 students, with highest honours.