# Florent Revest

## Software Engineering Student

#### Work Experience

- May 2017 Freelance Embedded Systems Consultant Self-Employed, Trondheim, Norway
- - o Experience includes: hardware adaptation, Bluetooth Low Energy, OTA updates, OEM relations...
- July Aug. Self-Driving Car Engineer (Intern)

EasyMile, Toulouse, France

- 2018 o Investigated SLAM algorithms from Berkeley, Carnegie Mellon & Google for autonomous driving
  - o Contributed an in-depth rewrite of Google Cartographer's technical documentation. Used ROS
- July Aug. Kernel Security Engineer (Intern) ARM, Cambridge, United Kingdom
  - o Implemented a memory protection hypervisor for ARMv8 operating systems in half the given time
    o Proposed a UEFI firmware sandboxing mechanism using KVM to the Linux Kernel community
- July Aug. Video Codec Engineer (Intern)

Free Electrons, Colomiers, France

- 2016 Created a Linux device driver for MPEG2 decoding on Allwinner VPUs. Merged mainline by Linus Closed one of the "High Priority Reverse Engineering Projects" of the Free Software Foundation
- July 2015 Graphics Software Engineer (Intern) Open Wide Ingénierie, Toulouse, France
  - o Developed an EGL and GLESv2 graphics backend for the Enlightenment Foundation Libraries
  - o Resulted in a new contract between Open Wide and Samsung Electronics to continue my work

#### Personal Open Source Projects

- AsteroidOS Full operating system for smartwatches. Open-source replacement for Wear OS by Google
- Raspcopter Drone flight system (sensors fusion, filtering, stabilization, telemetry and remote control)
- Mobile apps An online game, a music player, a books manager for Android. More than 15000 downloads
  - Others An x86 kernel when I was 14 y.o., an X11 desktop environment, a facial recognition tool...

#### Awards and Achievements

- Media Featured on **Wikipedia**, Engadget, TheRegister, Wired, PCWorld, linux.com, THN, XDA ... Speaker at **FOSDEM**, QtCon, C++ Workshops, Embedded Meetups, FOSS-North, CdL... Helped **Jolla** with their smartwatch demo and **ConnectWatch** with their crowdfunding
- Titles **Hero Open Source Developer**: Granted by Sony for my work on their Broadcom devices **Student-Entrepreneur**: National status granted by the french government for all my work
- Contests World Champions Programming School: Intensive training for ACM ICPC (2017) Google Code-In: Contributed to KDE, HaikuOS and OpenIntents (2009-10 & 2010-11)

#### Education

- 2014–2019 **MSc in CS** (*Diplôme d'Ingénieur Informatique*) *INSA*, Toulouse, France Computer Architecture, Real Time Firmware, Compilers Design, System and Network Security...
- Aut. 2018 **Exchange Semester**NTNU, Trondheim, Norway Computer Vision, Machine Learning, Automatic Speech Recognition, Natural Language Processing...

### Technical Skills & Languages

**Technologies** C, C++, Java, Python, QML, ARM Asm, Qt, Android SDK, Yocto, Git, Keras, OpenCV **Languages** French (*Native*), English (*Fluent*), German (*Conversational*, 7Y), Mandarin (*Beginner*, 4Y)