12 Rue Danièle Casanova
95600 Eaubonne, France
+33782224116
alex@alextoussaint.com
www.alextoussaint.com
alex-toussaint-51a439189
alextousss

Alex TOUSSAINT

Profile

I am a motivated engineering student with experience in robotics, electronics, and computer science. I co-founded a successful cryptocurrency trading platform and have completed various personal projects, including building a quadcopter drone and developing a 3D ultrasonic scanner. I have served as the CFO of a student association and managed a local robotics club. You can find most of my work with more details on my personal website www.alextoussaint.com.
I am currently looking for a six-month engineering internship from July to December 2023, preferably involving Robotics, Software Development and Machine Learning.

Education

September 2021 — **Master of Science at CentraleSupélec**, *Université Paris-Saclay*, Courses followed: **Statistics and Machine Learning, Control Theory, Continuum Mechanics, Fluid Mechanics, Electronics design and VHDL, Electrical Systems, Partial Derivative Equations, Economics, Java Programming**

September 2019 to July 2021 — **Preparatory Program for Top Graduate Schools**, *Lycée* Jean Baptiste Say, Paris, Intensive and advanced two-year program in Maths, Physics, Chemistry and Engineering Sciences

June 2019 — **High school diploma with highest honors**, *IT specialization*, Lycée Louis Armand Eaubonne

Experience

September 2022 to June 2023 — CFO of SBCS, CentraleSupélec's sound and light student association. We generate around 100k€/year organizing events for other schools. I automated most of the accounting, led multiple events and developed an **ERP software** for our use-case now used routinely.

September 2019 to June 2020 — Managed a local robotics club, teaching teenagers **Arduino programming and electronics**.

June 2019 — **Freelance work** as contractor on cryptocurrency trading bots.

September 2018 — **Co-founded and built kaktana.com**, a cryptocurrency-trading bot platform sold in September 2022. (**Javascript, Python, React, Django, Go, AWS Lambda, Linux Servers, Docker Swarm, Git, Bitcoin and Crypto Exchange trading APIs**)

Personal projects

2021 — I created a **3d ultrasonic scanner** working in the air with a phased-array transceiver. The project was featured on hackaday.com and made it to the front page of HackerNews. (**C/C++, High-Speed digital design, low-level MCU registers programming, Signal Processing, 3d visualization, KiCad**)

2019 — French National Engineering Competition: Designed and built a prototype of a robotic arm that was controlled by both an **electrocardiogram and computer vision**. The arm was able to locate and grasp a ball using brain electromagnetic signals and a pair of cameras to guide its movement. (**Signal processing, electronics, C/C++, OpenCV**)

August 2018 — Built with friends a high-altitude baloon (27km) using a custom PCB for data logging. We logged a lot of very interesting data, notably around sound wave progression in near-space and heat dissipation of electronics.**(Electronics, data logging and visualization)**

2016 to 2017 — **Built a quadcopter drone from scratch** from the carbon fiber frame to the control software on a Teensy MCU. (**PID controllers, attitude estimation, carbon fiber machining, electronics and sensors**)

Before 2016 — Built many model airplanes

Skills

Modeling softwares — Solidworks, Fusion 360, Matlab-Simulink, LTSpice, Comsol

Languages — Fluent English, Native French

Hobbies

Programming, Swimming, Running and Scuba Diving