

Pierre-Louis TILAK

Senior Embedded System Engineer

Contact

668 Horotiu road
Te kowhai
3388 Waikato
New Zealand

☎ 0204 188 69 16

✉ pierre.tilak@gmail.com

in linkedin://pierre-louis-tilak

🌐 pierre.tilak

Languages

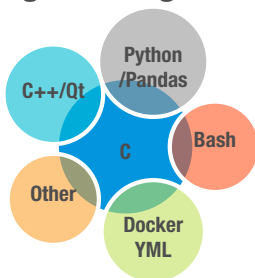
French: Mother tongue

English: Fluent

TOEIC: 925 pts

Spanish: Academic Level

Programming Skills



Personal Projects

Machine Learning

Online courses

Kaggle Competitions

OpenSource Cocktail Machine

ESP8266/Raspberry Pi

Paragliding Variometer

Atmega328p

Kobo E-reader

Interest

RC Models Design and build

RC Gliders and Airplanes

Music Guitar

Sport Para-gliding, Climbing,

Ski, Mountain Bike

Summary

- **Experienced Embedded System Engineer** with a vision of the Drone industry.
- Ready to take new challenges and **successfully drive company's projects**
- **Early employee of a fast-growing startup**: Autonomous, Multi-task, Multi-skilled, Motivated, capable of learning fast and adapt in any situation.
- Able to **design attitude filters** with data fusion and **navigation algorithms**
- Attracted by Data science, I have a **solid knowledge in data analysis**
- **Curious and passionate** person, I want to keep learning new skills

Experiences

2019

Aeronavics (Industrial Drone Company) Software Engineer

Raglan New Zealand

- Create a fork of QGroundControl application (Qt/C++): Custom build with several UI changes and compatibility with ArduCopter
- Active developer for QGroundControl opensource project, PullRequests on Mainline: Waypoint editor enhancement, Custom DEM with GDAL, FlightPlan fix for ArduCopter, ...
- Implement an ansible-based docker infrastructure for continuous integration, artifact repository and user database (Jenkins, Nexus OSS, LDAP)
- Run investigations on support cases: Develop analysis tools for Mavlink log, custom Ardupilot firmware for test purpose

2015-2019 **Delair (Industrial Drone Company) Developer in Autopilot team**

Toulouse France

- Work on Autopilot attitude filter (STM32, Extended Kalman Filter, Data Fusion)
- Create a new way-point navigation algorithm (A* algorithm, space configuration)
- Python development: Data Analysis over autopilot log database (Jupyter Notebook/Pandas/Numpy/Plotly)
- Working as a C/C++ developer to interface payload sensors on Linux
- Implement Continuous Integration on my team: To build, run tests scenario over simulator (Gitlab runners, Docker, YAML, JFrog Artifactory)
- Work as a support agent from the United States: Field experience of the product, good contact with customers / distributors

2014

SCLE SFE 3 months internship

Toulouse France

Test plan development: JTAG Boundary Scan (XJTAG Software)

2012

Polymont Subcontractor of Airbus Operating Method Writer

Toulouse France

Write operating method for maintenance on Iron-bird Airbus A330, A320 and A380

Education

2010-2014 **Master of engineering**

Institut National des Sciences Appliquées, Toulouse France

Automatic Control and Electronics / Embedded Systems

2013

Exchange Semester 6 Months Thailand

Chulanlongkorn University, Bangkok

Tools

- Python: Jupyter Notebook / Pandas/ Numpy / Plotly / Behave (BDD Tests)
- MS Excel / Gitlab / Jira: Ticketing, Project Management, Agile
- Docker, Gitlab/Jenkins Pipelines, Nexus/JFrog Artifactory: Continuous Integration