

# Pierre-Louis TILAK

Senior Embedded System Engineer

## Contact

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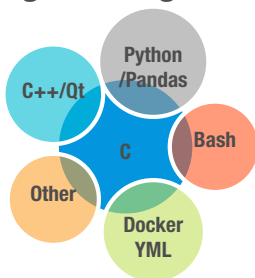
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🌐 pierre.tilak

## 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 to 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      | <b>Aeronavics (Industrial Drone Company) Software Engineer</b>  | Raglan New Zealand |
|           | <ul style="list-style-type: none"><li>• Created a fork of QGroundControl application (Qt/C++): Custom build with several UI changes and compatibility with ArduCopter</li><li>• Active developer for QGroundControl opensource project</li><li>• PullRequests on Mainline: Waypoint editor enhancement, Custom DEM with GDAL, FlightPlan fix for ArduCopter, etc.</li><li>• Implementation of an ansible-based docker infrastructure for continuous integration, artifact repository and user database (Jenkins, Nexus OSS, LDAP)</li><li>• Run investigations on support cases: Developed analysis tools for Mavlink log, custom Ardupilot firmware for test purposes</li></ul>  |                    |
| 2015-2019 | <b>Delair (Industrial Drone Company) Developer in Autopilot team</b>  | Toulouse France    |
|           | <ul style="list-style-type: none"><li>• Worked on Autopilot attitude filter (STM32, Extended Kalman Filter, Data Fusion)</li><li>• Created a new way-point navigation algorithm (A* algorithm, space configuration)</li><li>• Python development: Data Analysis over autopilot log database (Jupyter Notebook/Pandas/Numpy/Plotly)</li><li>• Worked as a C/C++ developer to interface payload sensors on Linux</li><li>• Implementation of a Continuous Integration on my team: To build, run tests scenario over simulator (Gitlab runners, Docker, YAML, JFrog Artifactory)</li><li>• Worked as a support agent from the United States: Field experience of the product, good contact with customers / distributors</li></ul> |                    |
| 2014      | <b>SCLE SFE 3 months internship</b>   | Toulouse France    |
|           | Test plan development: JTAG Boundary Scan (XJTAG Software)  |                    |
| 2012      | <b>Polymont Subcontractor of Airbus Operating Method Writer</b>   | Toulouse France    |
|           | Write operating method for maintenance on Iron-bird Airbus A330, A320 and A380  |                    |

## Education

- |           |  |  |
|-----------|--|--|
| 2010–2014 | <b>Master of engineering</b>                         | Institut National des Sciences Appliquées, Toulouse France |
|           | Automatic Control and Electronics / Embedded Systems |  |
| 2013      | <b>Exchange Semester 6 Months Thailand</b>           | 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