# Pierre-Louis TILAK

Embedded System Engineer


## Contact

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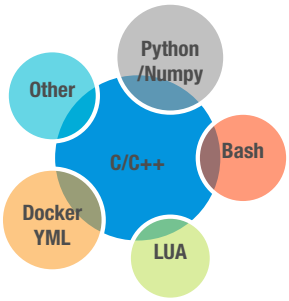
## Languages

French : Mothertongue
English : Fluent
TOEIC : 925 pts
Spanish : Academic Level

## Programming Skills




## Personal Projets

**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** Paragliding, Climbing, Ski, MountainBike

## Summary


- Experienced Embedded System Engineer specialized in firmware development.
- Ready to manage engineering project
- Strong experience in Drone industry, perfect vision of the future of new technologies.
- Ability to design entire firmware project : Requierements, Project Organisation, Programming, Testing and Validation.
- Early employee of a fast growing startup : Autonomous, Multitask, multi-skilled, ability to adapt and be commited in any situation.
- Can-do attitude and commited to give a broad vision and a result-driven attitude to distribute the best solutions.


## Experiences

2015-2019 **Delair (Industrial Drone Company)** ***Developper in Autopilot team*** Toulouse
Embedded System Engineer

- C Programming on microcontroller (STM32) : Sensor interface, Drivers, Communication protocols.
- Control Laws for Brushelss Gimbal : Kalman filtering, Brushless model control, FOC control
- Python engineering tools : GUI for experiment and log analysis ( PyQT, Matplotlib, Dash & Plotly ), Scripts to communicate (TCP, Serial Port), Web request, Unitary Tests and Continuious integration (Behave)
- Implementation of Developpement Environnement : Cross-compilation toolchain (arm-gcc, make), Continious Integration with GitLab Runners : Create docker images (build, complete test environement with simulator) Automatic release package generation and versionning (Gitlab Pipeline, JFrog Artifactory)
- CPP Programming on embedded linux : Drone sensor configuration, Thread and IPC ( Linux Signals, SharedMemory, ZMQ, ...)

2014 **SCLE SFE** ***3 months internship*** Toulouse
Test plan development : JTAG Boundary Scan (XJTAG Software)

2012 **Polymont Subcontractor of Airbus** ***Operating Method Writer*** Toulouse
Writing operating method for maintenance on Iron-bird Airbus A330, A320 and A380

## Education

2010–2014 **Master of engineering** Institut National des Sciences Appliquées, Toulouse
Automatic Control and Electronics

2013 **Exchange Semester 6 Months*Thailand*** Chulanlongkorn University, Bangkok

## Skills

Tools :

- Gitlab / Jira : Ticketing, Project Managment / Agile
- Docker, Gitlab Pipelines: Continious Integration
- BDD and Unitary Tests : Behave, Gtest
- Python : Numpy / PyQt / Plotly / Sockets
- Vim, Clang, GCC Toolchain STM32 : Make/Compilation/Debugger