# EMBEDDED SOFT & HARD DEV

QA & SDET

ELECTRONIC

Bordeaux (France)

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SOFTWACE

46 years old, passionate about **space** & high **technologies** since my childhood, I'm very excited to apply for a job in the new space industry.

"A day without learning and have fun is a day lost".

I am confident in my ability to adapt to any new situation.

### SKILLS

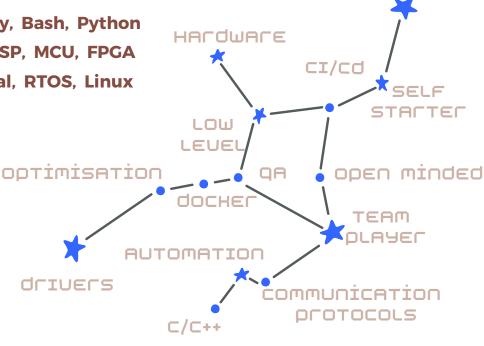
- Specialist in RT & Critical Embedded Software
- Specialist in SDET, QA, IVV
- Languages: C, C++, Assembly, Bash, Python
- Many experiences on MPU, DSP, MCU, FPGA
- Operating systems: bare metal, RTOS, Linux

THALES since 2023

LUOS 2021 - 2022

THALES 2010 - 2021

ALYOTECH 2006 - 2010



#### EDUCATION

Bachelor

(Université Paris 11) Electronics &

Signal processing

(EFREI Bordeaux)
Embedded systems &

Radio communications

More details here: <u>https://aquarust.github.io</u>

ACHIEVEMENTS

## LANGUAGES

French (native)

Master

English (fluent)



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#### Thales - Software & FPGA

2023-2024

Technical leader of an avionic multi bus testing module

• Define the product policy, the software and hardware architecture and help for the bids.

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- Communication with several avionics protocols (arinc 429, AFDX, military custom protocols).
- Develop the low level (communication protocols, linux drivers, FPGA) and the middleware software in C and Python through RS-422,
   SPI, I2C, CAN, PCIe, GPIOs.

#### Luos - SDET/OA

2021-2022

Responsible of the Luos QA process and of the end to end testing strategy.

- Automate CI/CD pipeline with Github Actions: compilation, test covering, unit tests, automatic tests on a hardware benchmark, logs saving. Verify the process is respected, upload the release to the registry & update the lib changelog.
   Assist the developpers for test quality & unit testing.
- Specify, develop and build a testing benchmark with several MCUs (Arduinos, STM32, ...). Script to auto flash the MCUs with various scenarii binaries, auto generate the network. Create QA PC docker with nginx, Rest API to easily access to the hardware from anywhere.

#### Thales - Software & SDET/QA

2010 - 2020

- Build the CI process for a whole Navy secured communication system: test of the REST API with Selenium, Robot Framework bash & python. BDD process. Auto generation of test documentation and results.
- QA for satellite communication systems: functionnal, performance, endurance tests. Automatic tools development. Test with Python and groovy with Jenkins environment. Test & Integration of the hardware in the Rafale airplane with the system team.
- OFDM communication protocol. Software development C/C++ on a RTOS (ucOS II). Validation in real environment.
- Drivers devloppement **C/C++** & **Assembly** and unit tests on a **DSP C6x** for a satellite system. Responsible of the communication protocol between a DSP / FPGA & GPP.
- Team leader of the vocoder software embedded team for a HF product, and test and development (C/C++/Python) on a DSP C54.
- Software development for a communication satellite in C with a DSP C54. Test the system and integration with the FPGA.

#### Alyotech - Software & Electronics

2006 - 2010

- Analogic & Digital electronic board conception.
- Automatic open/close doors system for Paris Metro: high critical security Firmware on a TI MCU in C and design of the analogic system.
- FPGA conception & VHDL for multibus boards (PCI, serials, USB, CAN, Ethernet ...). Design of the boards with Orcad.
- Surgical assistance: RT software ( C & assembly) for ATmega & MSP-430.

#### HOBBIES

- · Astronomy, astrophotography
- Fencing / Chess

- Video games (KSP, Survival Mars...)
- Science fiction

- Sport (Lightsaber, boxing)
- Piano, Guitar, Ocarina...