



C++ SOFTWARE ENGINEER

Education

2016 Master 2 in Robotics *University of Montpellier 2* at (LIRMM).

2015 Control Engineering Degree, *Ecole Nationale Polytechnique (ENP)*.

Certificates

2024 Certificate of graduation from (**The Ultimate C# Series** : (Code with Mosh). [Certificate here.](#)

2023 CPA - C++ Certified Associate Programmer (CPA : Issued by C++ institute). [Certificate here.](#)

2023 CPE - C++ Certified Entry-Level Programmer (CPE : Issued by C++ institute). [Certificate here.](#)

2023 Certificate in C++ programming (CS107 : from Saylor Academy). [Certificate here.](#)

2021 Certificate in **Cyber Sécurité (CompTIA Security+)**. [Certificate here.](#)

2020 Certificate of graduation from Complete Python Mastery (Code with Mosh). [Certificate Here.](#)

Work Experience professionnelles

Apr 2024 C++ - Cyber Security Engineer at Volt for Schneider Electric.

- Sept 2023**
- * Be part of the Control Expert team for the development of a PLC programming tool.
 - * Be responsible for the development of new features that concern the security aspect of that tool.
 - * Bug fixes, review and optimization of lines of code in C++/C according to MISRA standards.
 - * **Skills** : C++, C#, Git, Visual studio, MFC, COM Objects, cyber security.

Avr 2023 C++ Developer at Altim France.

- Oct 2022**
- * Optimisation and debut of a gui application for a chromatique adaptation module for images.
 - * Update failing features and make them match the specifications.
 - * Source code documentation.
 - * **Skills** : Linux Git C++ C Qt Cmake.

Août 2022 Devolper - Control Engineer for Expleo (**5years**).

- Jul 2017**
1. Ingénieur Cybersecurity - Developer.
 - * Development of a graphical tool for data anonymisation (Qt and Python).
 - * Implémentation of a data encryption algorithm (Cp-ABE) in C / python.
 - * **Skills** : C/python, Cryptographie (Cp-ABE), Qt, Linux, Git, Qml, CAN.
 2. 6 months Training **Product Security** (field : Cyber Security) **AJC Classroom (Serval-Concept)**
 - * **Skills** : Networks, Linux, C/C++/Python, Cryptography, Pentest Web, OS Hardening, Script-shell, Docker, PowerShell, Linux/Windows, Security IOT, metasploit, nmap, burp-suite, wireshark...
 3. C++ Software development (on Qt) for Renault.
 - * Development of a graphical user interface under Qt Creator (C++).(to automate validation tasks)
 - * Implementation of new features for the automation of specific tasks.
 - * **Skills** : C++ Qt-Creator CSS Cmake.
 4. Trainer - technical referent, for Peugeot.
 - * Ensure the autonomy of a team of 4 people on a project on ADAS systems..
 - * **Skills** : Python C Matlab CarMaker Simulink TCL Diagalyser CANalyser CANape CANFD Ethernet.
 5. Control law design for ADAS systems for Renault.
 - * Validation/Optimization of ADAS control law models (speed regulators and limiters).
 - * **Skills** : Simulink Matlab Python VBA.

6. **ADAS** CAN Gateway developer for Renault.
 - * Developpement of small **MBDs** to test the behavior of the sensors and actuators on the car mullet.
 - * Developing scripts on Matlab to automate some analysing process
 - * **Skills** : [Matlab/Simulink](#) [Python](#) [CANalyser](#) [CANoe](#) [Orcas](#) [DSpace](#) [DDT2000](#) [CAN/CANFD](#).
7. Software developer (**ADAS** systems) for Renault.
 - * Developpement of applications and Scripts (**Matlab,C++**) to automate tasks for the team.
 - * Developpement of Gui (**Matlab,Qt**) for a specified tasks.
 - * **Skills** : [C](#) [C++](#) [Matlab](#) [Qt](#) [MTS](#) [VdStreamer](#) [Dataviewer](#) [Dv-tool](#).

[Juil 2016](#) Four months of Internship in the **LGP** laboratory of **ENIT** (*École Nationale d'ingénieurs de Tarbes*).**title** :

[Mars 2016](#) *Modelling and Control of co-actuated systems : Application for a musculoskeletal system Electrically stimulated.*

- * Modeling of the musculoskeletal system (Quadriceps and Hamstring).
- * Synthesis and validation of a control law under simulation by sliding modes.
- * **Skills** : [Matlab](#) [Scilab](#) [Simulink](#).

[Mars 2016](#) 2months for a project prepared at the *Laboratory of Informatics, Robotics and Microelectronics of Montpellier*
[Jan 2016](#) (**LIRMM**). Subject : *advanced control of an exoskeleton.*

- * Mathematical modeling of the exoskeleton.
- * Synthesis of control laws by : **Backstepping**, **Sliding Modes**, **Dynamic Command**.
- * Simulation of results by *Matlab* and experimentation.
- * **Skills** : [C/C++](#) [Matlab](#) [Simulink](#)

[Juin 2015](#) 9 months of intership in the **CDTA** (*Advanced Technologies Development Center*) on a subject entitled : *Image*
[Sept 2014](#) *based control of a mobil robot car type, with ROS (robot operating system) based on fuzzy control as a method for visual servoing.*

- * Detection of a line drawn on the ground with a USB camera, using **VISP** library.
- * Line tracking, and obstacle avoidance using a laser sensor (LMS511), **See Results** [here](#).
- * **Skills** : [C/C++/Python](#), [ROS](#), [Linux](#), [VISP](#), [Asservissement visuel](#), [logique floue](#), [IA](#). [here](#).

☀ Mini Projects

- [2024](#) Developement of a média player (Audio, Video, Record) in **C++** with **Qt** (in progress)
- [2023](#) Un **Snake Game** 2D developped in **C++** with the **SFML** library (version 1), [see results here..](#)
- [2023](#) My first version of 2D video game developped in **C++** with the **SFML** library, [see results here..](#)
- [2016](#) Control of Multi-stack approach of a robotic assembly cell with a Multi-stack approach (**C++**). [see results here..](#)
- [2015](#) Control by fuzzy logic of a camera with 2 DOF for to track an object using VISP in (**C++**). [See results here..](#)
- [2015](#) Control of an autonomous mobile robort using ROS - for line tracking in **C++**, [see results here..](#)
- [2014](#) Speed control of a DC motor With Arduino using L298N.
- [2013](#) Realization of a robot follower of lines based on microcontroller with the sensor CNY70 in (C langage).

☀ Technical Skills

C/C++	*****	Simulink	*****	Qml	*****	Arduino	*****	ROS	*****	Robotics	*****
C#	*****	Cybersecurity	*****	Qt	*****	Linux	*****	Docker	*****	Script bash	*****
Python	*****	Visual Studio	*****	Git	*****	PLC	*****	SQL	*****	Html/CSS	*****
Matlab	*****	PowerShell	*****	Delphi	*****	Scilab	*****	LaTeX	*****	JavaScript	*****
Pascal	*****	Commande	*****	ADAS	*****	Step7	*****	IA	*****	Embeded	*****

☀ Languages

Français ***** Anglais ***** Arabe ***** Espagnol ***** Allemand *****

☀ Interests

Sports (**Kung-Fu** : Participation in competitions of **Sanshou**, **Aikido**, **Swimming**, **Boxing**), **Chess**, **Drawing**.