



## Academic

### Double Degree

Sep 2020  
Sep 2022

**ECN - École Centrale de Nantes** (*Nantes, France*)  
 ➤ **Engineering degree with specialization in Robotics and R&D (Master's degree).** Grand École d'Ingénieurs, 4<sup>th</sup> place in France according to *l'Étudiant* in 2021.

Feb 2017  
Dec 2020

**UFRGS - Universidade Federal do Rio Grande do Sul**

(*Porto Alegre, Brazil*)

➤ **Control and Automation Engineering.** Among the best universities in Brazil and twice the best control and automation/mechatronics engineering program according to ENADE.

Nov 2022  
Sep 2023

### Professional Experience

Jun 2025  
Currently

**Conceptu Protótipos & Sistemas** (*Porto Alegre, Brazil*)

Senior Software Quality Assurance C++ Engineer

➤ **DevOps for embedded systems**, including various MCUs such as ESP32, AVR, SAM, Nxp MCX, STM32: Experience with: ESP-IDF, ASF, CMISIS, FreeRTOS, GNU Arm Embedded Toolchain, GCC, Clang, CMake, Ninja, Docker, CI/CD

Nov 2023  
Apr 2025

**Instituto SENAI de Inovação em Sistemas de Sensoriamento**  
(*São Leopoldo, Brazil*)

Mobile Robotics Researcher

➤ **Autonomous mobile robots for logistics and transportation:** Experience with ROS 2, including hardware drivers, communication and low-level control with ros2\_control, SLAM and navigation with Nav2, fleet management with Open-RMF, and simulation with Gazebo, Isaac Sim and Unreal Engine.

Apr 2022  
Sep 2022

**TRIMBLE Nantes** (*Carquefou, France*)

Software Engineer Intern

➤ **IMU-only Data-driven Positioning:** Experience with Python, Linux, IMUs, GNSS and limited experience with: Machine Learning.

Mar 2021  
Aug 2021

**Axter Automation** (*Vaucresson, France*)

Robotics Intern

➤ **Development with industrial mobile robots (AGV):** Development with smart sensors, robot-server communication, obstacle detection security system. Experience with app dev for Windows and Linux, communication protocols, ROS and SLAM.

May 2021  
Jul 2021

**LAEROMECH Engenharia** (*Porto Alegre, Brazil - Remote*)

Mechatronics Designer

➤ **Project in conjunction with AGCO South America:** Design of an automated agricultural distributor. Experience in mechatronics, electronics and mechanical design.

Aug 2018  
Jul 2020

**LAMECC - UFRGS (Mechatronics and Control Lab)** (*Porto Alegre, Brazil*)

Undergrad Researcher

➤ **Annelida Project:** Development of a inchworm-type robot for cleaning oil pipelines from 4" to 10". Experience in mechatronics, electronics, instrumentation, hydraulics and mechanical design.

### Contact

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### Skills

### Software

### Relevant projects

#### forg\_bot (Public)

Navigation with Curiosity Rover inspired mobile robot in ROS 2



#### ros2\_docker (Public)

My workflow to run ROS 2 applications inside Docker, including base stage to deploy applications and ...



### Languages, tools and frameworks

- C, Embedded C, Modern C++ .
- ROS and ROS 2:
  - URDF, ros2\_control, SLAM, Nav2, Open-RMF.
- Python:
  - NumPy, SciPy, Pandas, Matplotlib.
- MATLAB, Git, Docker, LATEX, bash, IEC 61131-3 (ST, IL/ASSEMBLY, LADDER, FBD, SFC).

### Simulation

- Gazebo, Isaac Sim, Simulink, Micro-Cap, PSIM, Proteus, LabView.

### CAD and 3D modelling

- SolidWorks, FreeCAD, Blender.

### Hardware

- Controllers and computers
  - Arduino, Intel MCS-51, Atmel AVR, ARM Cortex, dSPACE, NI DAQ, IoT, RTOS.
- Sensors
  - LIDARs, RGBD Cameras, IMU, GNSS.
- Others
  - Mechatronic prototyping, PCB manufacturing, Instrumentation, Communication Protocols.

### Languages

Portuguese	Native
English	Fluent
French	Fluent