



Contact

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Skills

Software

Relevant projects

forg_bot (Public)

Navigation with Curiosity Rover inspired mobile robot in ROS 2

C++

ros2_docker (Public)

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

Dockerfile

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, L^AT_EX, 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

Academic

Double Degree

Sep 2020	ECN - École Centrale de Nantes (<i>Nantes, France</i>)
Sep 2022	➤ Engineering degree with specialization in Robotics and R&D (Master's degree) . Grand École d'Ingénieurs, 4 th place in France according to <i>l'Étudiant</i> in 2021.
Feb 2017	UFRGS - Universidade Federal do Rio Grande do Sul (<i>Porto Alegre, Brazil</i>)
Dec 2020	➤ 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

Nov 2023	Instituto SENAI de Inovação em Sistemas de Sensoramento (<i>São Leopoldo, Brazil</i>)
Apr 2025	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.
Mar 2023	Aprix (<i>Porto Alegre, Brazil</i>)
Sep 2023	Machine Learning Intern
	➤ Data Science for price optimization: Experience with Python (NumPy, Pandas, back-end), data analysis and visualization, SQL, limited experience with: Machine Learning, cloud, Microsoft Azure.
Apr 2022	TRIMBLE Nantes (<i>Carquefou, France</i>)
Sep 2022	Software Engineer Intern
	➤ IMU-only Data-driven Positioning: Experience with Python, Linux, IMUs, GNSS and limited experience with: Machine Learning.
Mar 2021	Axter Automation (<i>Vaucresson, France</i>)
Aug 2021	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	LAEROMEC Engenharia (<i>Porto Alegre, Brazil - Remote</i>)
Jul 2021	Mechatronics Designer
	➤ Project in conjunction with AGCO South America: Design of an automated agricultural distributor. Experience in mechatronics, electronics and mechanical design.
Aug 2018	LAMECC - UFRGS (Mechatronics and Control Lab) (<i>Porto Alegre, Brazil</i>)
Jul 2020	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.