





Robotics Engineer and Software Developer

WHO AM I?

I'm a recently graduated Robotics Engineer and Developer with a M.Sc. on Mechatronics Engineering and Bachelors on both Mechanical and Electronics Engineering. I've also learned about web technologies by working on several projects related to enhancing robotics applications with the power of the Internet. I'm passionate about programming, robotics and the web, and always eager to learn and have an impact.

SKILLS LANGUAGES

Python / JavaScript / C++ / C# / Docker / Agile/SCRUM / Linux / Git

Spanish - Native English - Fluent Italian - Fluent German - Basic

EXPERIENCE

2021 **Robotics Software Engineer** Present

Instituto Italiano di Tecnologia.

Developed a pipeline for quickly and easily deploying applications in robots through Docker containers. Developed the source code for several applications in Python and C++. Actively maintaining the IIT website where these apps are stored. Worked on firmware for AMC motor drivers. Worked using the Agile/SCRUM methodology.

Docker / C++ / Python / Bash / Angular

2020 - 2021 **Robotics Engineering Intern**

Developed a web application for automated Pick-And-Place using ABB Robots and Computer Vision algorithms. In charge of all initial phases of the project from architecture planning to MVP.

ASP.NET / JavaScript / MySQL / OpenCV / ABB RWS API

EDUCATION

2018 - 2021 Master's Degree - Mechatronics Engineering Politecnico di Milano

Graduated with a high final grade after completing courses on advanced control techniques,

robotics systems, kinematics, and more.

2012-2018 Bachelor's Degree - Electronics Engineering Universidad del Norte

Graduated with honors after completing courses on communication protocols, electronic design,

programming basics, electronic circuits, among others.

2012-2018 Bachelor's Degree - Mechanical Engineering Universidad del Norte

Graduated with honors after completing courses on control schemes, mechanical design, kine-

matics, thermodynamics, among others.

VOLUNTEERING PROJECTS

2021 Robotic Automation of Laboratory for Faster Covid-19 Testing

Increased COVID-19 testing capabilities of a laboratory in Italy by automating the process with programmable robots. In charge of communicating and interfacing with the robots as well as developing a backend Flask service that connects to the Hospital's servers.

Python / Flask / Bash

TRAININGS

2022 Training on the unit testing using GTest/GMock Istituto Italiano di Tecnologia

Training on Docker/Docker Compose/Docker Swarm

Istituto Italiano di Tecnologia

2021