Nicola Saltarelli, Computer and Automation Engineer

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https://sltncl.github.io

About me

I am Nicola Saltarelli, currently in my second year of the Master's program in Automation Engineering at the Polytechnic University of Bari. Born in Foggia on 2 June 2001, I have a strong passion for technology, automation, and programming, and I am dedicated to continually enhancing my skills in these fields.
Throughout my academic career, I have participated in various academic and personal projects, where I applied my knowledge and developed problem solving and teamwork skills. These experiences have allowed me to bridge theory and practice, contributing to my professional development.
I am a goal-oriented and determined individual with a strong commitment to continuous learning, eager to contribute to the advancement of technologies that shape the future.

Education

2023 – now **Master degree** in Automation Engineering at Politecnico di Bari.

2020 – 2023 **Bachelor degree** in Computer and Automation Engineering at Politecnico di Bari.
Thesis title: *Identification and Fractional Order Control of DC Motors*.
Vote: 110/110 cum laude

2015 – 2020 **High School Diploma** in Administration, Finance, and Marketing with a specialization in Business Information Systems at I.T.E.T. Blaise Pascal.
Vote: 100/100

Skills

Coding Java, Python, R, SQL, JavaScript, C++, HTML, CSS, NodeJS, ReactJS, VHDL, LaTeX

Automation Matlab, Simulink, Solidworks, LabView, Fritzing, NI Multisim, ROS, Docker.

Languages Italian: native speaker. English: level B2.

Projects

Turtlebot3 autonomous exploration — Implementation of an autonomous exploration system based on TurtleBot3, ROS2, and Gazebo.

Motion control with Neural Network — Motion control of a 6 degree of freedom (DOF) robotic manipulator with neural network.

Snake on FPGA DE10-Lite — This repository describes the implementation of the Snake game on the FPGA DE10-Lite platform using the VHDL hardware description language.

Position control of linear actuator — This repository presents the implementation of a system for controlling the position of a linear actuator.

Trajectory Planning for Niryo Ned 2 — Trajectory planning project for the Niryo Ned2 robot.

JustChat — Project for a web-based messaging application similar to WhatsApp Web.