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.

Languages — Italian: native speaker. English: level B2.

Projects

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. The system comprises an HC-SR04 ultrasonic sensor, an ELEGOO UNO R3 processing unit, and a motor control board based on the dual H-Bridge L298N driver.

Trajectory Planning for Niryo Ned 2 — This repository contains the materials and code related to the trajectory planning methodology developed for the Niryo Ned 2 robot.

JustChat — JustChat is a project dedicated to developing a web application designed to allow users to exchange private messages in real-time, similar to WhatsApp Web.