

Simone Giampà

Computer Science Engineer

About me

As a Computer Science Engineer, I possess a profound passion for leveraging technology to solve complex problems and drive innovation. With a solid foundation in ML and Robotics principles and a diverse range of practical experiences, I bring a unique blend of technical expertise and creative problem-solving abilities.

Personal

Simone Giampà

📅 21/08/1999

🌐 Nationality: Italian

📍 Milan, Italy

Areas of specialization

Artificial Intelligence · Robotics
· Machine and Deep Learning
· Embedded Systems

Interests

Aerospace · Space Exploration
· Robotics · Artificial Intelligence

Programming

C, C++

Java

Python

Matlab

ROS, ROS2

Tensorflow, Tensorflow Lite

SQL

L^AT_EX

Hardware Platforms

Arduino Uno

Arduino Nano 33 BLE Sense

STM32F4 Nucleo

ESP32 Wifi

Languages

mother tongue C2 | Italian
proficient C1 | English

Certifications

2018 IELTS Grade 7.5: Level C1
2017 B2 First Cambridge
2016 B1 PET Cambridge
2015 Trinity College Grade 6

Contacts

✉ Mail

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🌐 LinkedIn Profile

🐙 Github Profile

EDUCATION

2021 - Present	Master's Degree in Computer Science Engineering POLITECNICO DI MILANO · Milan, Italy 📍 Currently attending	 POLITECNICO MILANO 1863
2018 - 2021	Bachelor's Degree in Computer Science Engineering POLITECNICO DI MILANO · Milan, Italy 📍 Grade: 101/110	 POLITECNICO MILANO 1863

PROJECTS AT POLITECNICO DI MILANO

2023	Robot head construction: Robotics and Design multi-disciplinary course Workshop Laboratory · 3D printing · Multidisciplinary project Repository Multidisciplinary project of Robotics and Design: building and programming of a 3d printed and programmable robot head capable of mimicking human emotions and expressiveness, while interacting with other robots of the other groups	
2023	Neural Network for Spoken Language Recognition on an Embedded system Tensorflow Lite · Neural Networks · Embedded System Repository A neural network recognizing the natural language from spoken human conversations. Developed on an Arduino Nano 33 BLE (TinyML kit), with Tensorflow Lite	
2023	Natural Language Text Processing with Transformer Models Neural Networks · BERT Transformers · Natural Language Repository Text analysis, sentiment analysis and response generation with BERT Transformer models	
2023	Nonlinear ARMA time series classification with Online Machine Learning models Streaming Machine Learning · Python · River library Repository Non-linear ARMA time series generation and classification with streaming (incremental learning) machine learning models in Python using the River ML library	
2022	Deep Learning: Convolutional Neural Networks Tensorflow · Python · Image Classification Repository Image classification challenge with convolutional neural networks and transfer learning	
2022	Mobile Robotics projects with ROS and real-world LIDAR and encoders data ROS2 · C++ · SLAM · Mobile Robot · Autonomous navigation Repository Two projects in C++ using ROS aimed at analyzing and computing data coming from mecanum wheels encoders sensors and a LIDAR for autonomous simultaneous localization and mapping (SLAM), mounted on a mobile robot in the Robotics laboratory	
2022	STM32 Nucleo with Sensor Systems development board Sensors · C · Embedded System Repository Development of many little projects aimed at handling a wide variety of sensors coupled with the STM32 Nucleo board, using FreeRTOS and several wire communication protocols	
2022	STM32 Nucleo with Miosix Embedded OS kernel-space programming STM32 · Embedded OS programming · C++ · Linux Repository Development of John Conway's Game of Life cellular automaton on an STM32 running Miosix embedded OS in kernel-space and communicating via serial interface with an emulated terminal on a Linux machine	
2021	SW engineering thesis project: an online multi-player board game Java · Game · Group thesis work Repository Group project development in Java (terminal and GUI interfaces) of a multi-player online board game: Maestri del Rinascimento	
2021	LASER dynamics simulation with cellular automata in Matlab and Java LASER dynamics · Matlab · Java Repository Simulation of LASER quantum dynamics using a cellular automata	
2021	Vivado project: image histogram equalization in VHDL Xilinx Vivado · VHDL Repository Logic circuit definition of an algorithm for the equalization of a gray-scale image histogram	
2020	A time and memory efficient command-line text editor in C C · Algorithms and Data Structures Repository Time and memory efficient text editor using optimized algorithms and data structures	