



Angelo Anzalone

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ABOUT MYSELF

As an Electronic Engineer, I bring a solid technical foundation combined with an enthusiasm for innovative technologies. Throughout my career, I have maintained a genuine curiosity that drives me to continually expand my knowledge and capabilities in the field.

WORK EXPERIENCE

 **STMICROELECTRONICS** – ARZANO (NAPLES), ITALY

INTERNSHIP (BACHELOR'S DEGREE) – 14/03/2018 – 12/07/2018

Project Highlights

- Developed a LLD (Low Level Driver) for I2C serial communication protocol applied to a GNSS testing framework. Implemented a C++ to manage the I2C communication between the STM32-F401RE Nucleo-64 board and the X-NUCLEO-GNSS1A1 expansion board.

 **UNIVERSITÀ DEGLI STUDI DI NAPOLI FEDERICO II** – NAPLES, ITALY

THESIS (MASTER'S DEGREE) – 19/10/2020 – 19/07/2021

Project Overview

- The work aimed to demonstrate the potential of Artificial Intelligence on edge devices, characterized by low performances and low power consumption.
- The case study considered biomedical ECG signal and the classification of arrhythmias.

Hardware and Software Utilized

Hardware:

- B-L475E-IOT01A Discovery Kit
- MAX30003WING Expansion Board

Software:

- Edge Impulse
- STM32CUBEIDE

The result obtained attest that is possible to perform an analysis based on the morphology of the ECG wave.

 **HITACHI RAIL S.P.A.** – NAPLES, ITALY

INTERNSHIP – 15/09/2021 – 15/03/2022

Skills and Experience

- Gained practical experience in using Python for data analysis, with a primary focus on working with Excel files.
- Achieved hands-on experience in Java application development.

 **JMA WIRELESS** – CASTEL SAN PIETRO TERME (BO), ITALY

FIRMWARE ENGINEER – 01/04/2022 – 14/04/2024

Skills and Experience

- Proficient in working with SoC architectures (C, C++), with a specific focus on ARM Cortex-R5 32-bit processors running FreeRTOS.
- Skilled in interfacing with Analog-to-Digital Converters (ADCs) and Digital-to-Analog Converters (DACs) through I2C and SPI communication protocols.
- Proficient in utilizing a spectrum analyzer, oscilloscope, and multimeter for signal analysis, waveform visualization, and precise electronic measurements.
- Effective collaboration with colleagues from the United States, fostering a dynamic and productive working relationship.

 **ALMA MATER STUDIORUM UNIVERSITÀ DI BOLOGNA** – BOLOGNA, ITALY
RESEARCH FELLOW IN OCCUPATIONAL MEDICINE (ENGINEERING) – 15/04/2024 – CURRENT

Skill and Experience

Contributing to an ongoing research project that investigates cognitive load in human-robot collaboration within industrial environments, with a focus on technical tasks including:

- Developing and populating an experimental database, performing data analysis, and interpreting results (Excel, Python).
- Employing sensor-equipped gloves to collect physiological and interaction data for real-time load assessment.
- Contributing to the organization and management of the technical setup for tests, ensuring the efficient and accurate execution of experiments in collaboration with the research team.
- Collaborating closely with professors and researchers in biomedical engineering, occupational medicine, and neurophysiology to drive the achievement of project goals.

● **EDUCATION AND TRAINING**

19/09/2018 – 19/07/2021 Napoli , Italy
MASTER'S DEGREE IN ELECTRONIC ENGINEERING Università degli Studi di Napoli Federico II

Address Corso Umberto I, 40, 80138 , Napoli , Italy | **Website** <https://www.unina.it/home> |
Field of study Digital electronics, Power electronics | **Final grade** 110/110 e lode | **Level in EQF** EQF level 7 |
Type of credits CFU | **Number of credits** 180 |
Thesis Design of an electronic system for eHealth applications based on STM32L475E MCU and Edge AI

19/09/2013 – 12/07/2018 Naples, Italy
BACHELOR'S DEGREE IN ELECTRONIC ENGINEERING Università degli Studi di Napoli Federico II

Address Corso Umberto I, 40 , 80138 , Naples, Italy | **Website** <https://www.unina.it/home> | **Final grade** 95/110

19/09/2018 – 19/07/2021 Łódź, Poland
MASTER'S DEGREE IN ELECTRONIC ENGINEERING Lodz University of Technology

Address Stefana Żeromskiego 116, 90-924, Łódź, Poland | **Website** <https://p.lodz.pl/en>

● **LANGUAGE SKILLS**

Mother tongue(s): **ITALIAN**
Other language(s):

	UNDERSTANDING		SPEAKING		WRITING
	Listening	Reading	Spoken production	Spoken interaction	
ENGLISH	B2	B2	B2	B2	B2

Levels: A1 and A2: Basic user - B1 and B2: Independent user - C1 and C2: Proficient user

● **SKILLS**

Programming languages

Python / Bash scripting | C++ | C

Tools

Microsoft Office | Linux (Terminal Commands, Bash/Shell) | GIT version control, Linux Command

● **CONFERENCES & SEMINARS**

<https://www.coursera.org/>

Introduction to Embedded Machine Learning

This course will give you a broad overview of how machine learning works, how to train neural networks, and how to deploy those networks to microcontrollers, which is known as embedded machine learning or TinyML

Link [coursera.org/verify/TJFMVXMUFQH8](https://www.coursera.org/verify/TJFMVXMUFQH8)