


SIMONE MANONI

 25/10/1996
Bologna Italy

EXPERIENCE

Ph.D Student, 11/2022 - Current
University of Bologna, Bologna, Italy

- Conducting research on accelerating sparse neural network computations using RISC-V processors.
- Serving as a tutor for the Computer Architecture course in the EECS Master's program for the 2023-2024 and 2024-2025 academic years.

Hardware Design Engineer, 09/2021 – 11/2022
Semidynamics, Barcelona, Spain

- Pursued my master thesis project, which consists in splitting EPAC1.0, the HPC microprocessor designed by EPI (European Processor Initiative), on multiple FPGA boards. The purpose of the project is to make scalable the prototyping procedures of future versions of EPAC, which will include more than the current four cores, and therefore cannot be performed on a single FPGA.

Digital Verification Engineer, 09/2020 - 12/2020
Neptune s.r.l., Bologna, IT

- Occasional provision focused on developing test benches in VHDL language for a space communications LDPC encoder implemented on FPGA board.

Bachelor Thesis Intern, 12/2018 - 03/2019
WiLab - CNR, Bologna, IT

- Bachelor thesis entitled "Analysis and implementation of computer vision techniques for face detection" (Mentor: Prof. Gianni Pasolini). The aim of the dissertation work was the realization of a computer vision system able to provide an estimate of the number of people inside a classroom through the use of a convolutional neural network, in order to evaluate potential overcrowding situations.

Electronic Specialist, 06/2014 - 07/2014
Emerson Electric Co., Castel Guelfo (BO), IT

- Summer internship in the assembly department. Assembled uninterruptible power supply equipment.

EDUCATION AND TRAINING

Alma Mater Studiorum - University of Bologna, Bologna-IT, 09/2019 - 03/2022

Master of Science: Electronic Engineering

- 110/110 cum Laude.
- Completed coursework in signals elaboration, mathematical methods, microelectronics, hw-sw design of embedded systems, analog circuit design, advanced power electronics, advanced solid-state sensors, and advanced computer architectures.

St. Giles International, Brighton-UK

Certificate of Attendance and Advancement in The Language: General English

General english, intensive course (24 hours per week).

Alma Mater Studiorum - University of Bologna, Bologna-IT, 09/2015 - 03/2019

Bachelor of Science: Electronic and Telecommunication Engineering

- 109/110.
- Major in Electronics
- Main exams: digital systems design, computer architectures, signal processing, digital, analog and power electronics, embedded systems, electronic measurement.
- Winner of "Lions Club - Galvani" scholarship assigned for the best Curriculum Vitae and thesis work.

SKILLS

- Microprocessor-based systems.
- Digital design (VHDL, systemVerilog).
- C/C++ programming.
- Development of microcontroller-based applications.
- MATLAB.
- OpenCV library.
- Analog, Digital & Power circuits analysis.
- Excellent team worker.
- Excellent communication skills.
- Problem Solving.

LANGUAGES

Italian: First Language

English:

C1

Advanced

Spanish:

B1

Medium

EXTRA-CURRICULAR ACTIVITIES

Electronic Specialist, Beyond Common Ideas, Bologna

- Developed hardware and software solutions for audiovisual performance and installations within a team of 7 people.

HOBBIES

Djing, Basketball.