

Marco Fontana

Electronic Engineer

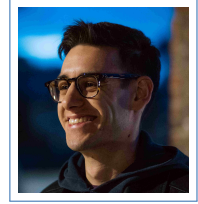
Castel d'Ario – Mantova

* 24 january 1997

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github.com/its-fonsy



Education

- 2020–2024 **Master's Degree in Electronic Engineering**, 100
Alma Mater Studiorum - University of Bologna
Master Thesis *Hardware and Software development of an Ethernet module on FPGA*
- 2016–2020 **Bachelor's Degree in Computer Science, Electronic and Telecommunication Engineering**, 104
University of Parma
Thesis *Performance analysis of an IP module for FFT computation on FPGA*
- 2011–2016 **Secondary School certificate in Technical Institute of Technology**, 94
Istituto Superiore Enrico Fermi – Mantova
Thesis *Rubik's cube solver robot*

Master Thesis

I have contributed to AISaqr project, an Open Source SOC that embeds a RISC-V 64-bit CPU and other peripheral to be used on drones. My job was to implement an Ethernet IP inside the SOC and verify it with simulation on FPGA (VCU118 and Genesys2) and Linux OS (CVA6-SDK).

References

AISaqr: <https://github.com/AISaqr-platform/he-soc>

CVA6-SDK: <https://github.com/AISaqr-platform/cva6-sdk>

Experiences

- from 05/2024 **Electronic Engineer**, Fraste, Nogara (VR)
to Today Development of electrical system for drilling rigs.
- from 04/2024 **NuttX Driver Developer**, University of Bologna, Bologna (BO)
to 05/2024 Development and test of an Ethernet driver for NuttX.
- from 05/2015 **Electrician**, Gasparini P.I. Andrea, Castel d'Ario (MN)
to 07/2015 Electrical system for houses

Computer skills

Programming Languages

SystemVerilog, Verilog, VHDL, Bash,
C, Python, C++, Lua, Matlab, AVR-
Assembly

Operating Systems

GNU/Linux, Arch, Ubuntu, Debian,
Windows, Mac OS

Office Applications

Word, Excel, PowerPoint

Markup Languages

CSS, HTML, \LaTeX , Markdown

3D Modeling Softwares

FreeCAD, OpenSCAD, Fusion360

Development Systems

Git, Make

Languages

Italian Native

English B2 (read, written and spoken)

Interests

- Books: science fiction, fantasy, classics, etc.
- 3D Printing and Do It Yourself;
- Technology, videogames, computers;
- Open Source and self hosting;

Personal Projects

Library for light sensor TSL2591

<https://github.com/its-fonsy/tsl2591-avr>

Library written in C for the light sensor TSL2591 aimed to be used with ATmega328P.

Lyrpy

<https://github.com/its-fonsy/lyrpy>

Python application that prints on the terminal the lyrics of the playing song and it emphasize the singed verse.

Fastfingers

<https://github.com/its-fonsy/fastfingers>

A replica for the terminal of the "10FastFingers" games written in C using ncurses library.