Simone Shawn Cazzaniga

Design Engineer - DSP/Electroacoustics R&D

✉ Email | ☎ (+39) 3331554385 | ⌂ www.magiwanders.com | GitHub | LinkedIn

I constantly strive to find and contribute to exciting and well-executed projects that serve a meaningful purpose whithin the Audio Digital Signal Processing landscape and adjacent fields. I value working with teams and individuals that share a sound work ethic and that are committed to crafting excellent products that are both useful and elegant. Feel free to explore my full résumé for additional details about my work experience, personal projects, online courses and hobbies.

Italian@Native | English@C1 | Chinese@A1

PROFESSIONAL EXPERIENCE

Design Engineer - DSP/Electroacoustics R&D (BdSound) Milan **2023-08 - Current.**
State of the art DSP/ML audio algorithms prototyping (Python3) and implementation (C99/C++20/Pybind11/JUCE) such as BEV engine sound generation, echo and feedback cancellation, spatial audio, media processing.

Technical Author (RISC-V Foundation) **2022-11 - 2023-03**
Chapter 3 through 6 of the RISC-V Fundamentals (LFD210) course.

Research Engineer Intern (ST Microelectronics) **2023-02 - 2023-07**

EDUCATION

M.Eng. Music&Acoustics Engineering (Politecnico di Milano) Milano (it) **110/110** **2022-12**

B.Eng. Automation&Control Engineering (Politecnico di Milano) Milano (it) **2020**

Diploma di Liceo Classico (Liceo Classico Bartolomeo Zucchi) Monza (it) **2016**

PROJECTS

IdPN Flutter Website	**2019-09 - Current**
SHEAS - Simple Hardware Editor And Simulator	**2022-07 - Current**
Introduction to Pipelining - CompArch Lesson Using SHEAS	**2022**
Nand2Tetris Online JS Simulator Reimplementation	**2021-03**
RISC-V RV32IMAC Sliderules	**2021**

ONLINE & SINGLE COURSES

Numerical Modeling & Simulation in Acoustics (054274)	**2024**
Science, Technology and Wikipedia PhD Course	**2023-06 2023-07**
User Experience Research and Design Specialization (Auditor)	**2025 - Current**
Nand2Tetris I&II (Auditor)	**2020 2021**

VOLUNTEERING

RISC-V/LFX Mentor **2023**

1. **Bringing the "Sliderules" Cheat Sheets to the Web Mentorship (Summer 2023)**
2. **Add F-extension support to "Ripes" RISC-V Micro-Architectural Visual Educational Simulator (Autumn 2023)**

Camp Coordinator for S.C.I. camp IT-SCI 10.2 | Chivasso, Italy	**2023-07**
Camp Coordinator for S.C.I. camp IT-SCI 13.1 | Rome, Italy	**2022-08**
Local Event Coordinator for S.C.I. Workshops | Milan, Italy	**2021 2024**
Volunteer for S.C.I. camp AM-HUJ 18.4 | Yerevan, Armenia	**2019-07**
Volunteer for S.C.I. camp PT-BG 26.1 | Aldeia Nova, Portugal	**2017-09**

C99 | C++20 | Python3 | NumPy | SciPy | Pandas | JUCE | VSCode | Git | Reaper | Jupyter