FRANCESCO BARCHERINI

Contact

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Certificates

Alfiere del Lavoro
Federazione Nazionale dei Cavalieri del Lavoro, 2021

FIRST Certificate
Cambridge Assessment English B2, 2020

ICDL Full Standard
AICA, 2019

Fuoriclasse della Scuola
FEduF and MIUR, 2019

Soft skills

Aptitude
Logical-mathematical approach, problem-solving, learning speed, tenacity

Teamwork
Persuasion, delegation skills, ability to ask for help, planning meticolousness

Interpersonal skills
Empathy, reliability, adaptability, joviality

Other interests

Piano, travelling, tv and cinema, scientific publication, actuality

Education

10/2021 - present	**Sant'Anna School of Advanced Studies** **Honours Student - Engineering** Fourth year - Students Representative
09/2024 - present	**University of Pisa** **Master's Degree in Computer Engineering** Curriculum *Cyber-physical systems*
09/2021 - 05/2024	**University of Pisa** **Bachelor's Degree in Computer Engineering** Thesis: "*Development of support for user processes and system calls in RISC-V architecture*" *Final Grade: 100/100 cum Laude*
09/2016 - 06/2021	**Liceo Renato Donatelli - Terni** **Scientific High School Diploma** Regular curriculum with focus on mathematics and physics *Final Grade: 100L/100*

Educational and professional experiences

07/2024 - 09/2024	**Accelerat**: research intern at Sant'Anna spin-off. I set up software and tests for ARM multi-domain systems to check interference in memory access, peripheral control and system performance, working with firmware, hardware debugger and hypervisor technology.
07/2022 - 03/2024	**JEBE Sant'Anna**: Junior Enterprise Business and Engineering. Project Manager in the IT Area.
01/2023 - present	**ME.MO.**: orientation project for university promoting merit and social mobility. Member of the organizing staff and mentor.
03/2023 - 05/2023	**Zerynth**: 3-month internship as an Intern IoT Engineer. Responsible for setting up, developing, and testing the Linux zAgent node for industrial IoT operations. Utilized mainly hardware and C++/Python code in the process.
03/2022- 07/2022	**CyberChallenge.IT (CINI)**: course and competition focused on ethical hacking and cybersecurity. Acquired skills in implemen-ting best practices to defend against cyber-attacks.
2016 - 2021	**Achievements in High School competitions**: Informatics Olympiad (silver), Physics Olympiad (silver), Mathematics Olympiad (silver), Competitive Debate, Statistics Olympiad (first place).
12/2019 - 06/2020	**Arturo2 (HackLab Terni)**: Arduino and Robotics Course, assembly of a rover with computer vision.

Hard skills

Advanced level in C/C++, Python, SQL, server and client-side web development, Wordpress

Strong understanding of Cybersecurity concepts and algorithmic modeling

Good understanding of computer architecture, kernel programming and OS, with focus on Intel, ARM and RISC-V architectures

Fundamental knowledge of Java programming and experience in Delphi, Arduino, and MatLab development

Principles of functional programming: Rust and Haskell

Familiarity with Linux and Windows operating systems, dockerization and virtualization

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Work Organization: Latex, Git, MS Office, Google Workspace

Languages: Italian (native), English (excellent), French (good), German (elementary)