Cristian Vasilache

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EDUCATION

Faculty of Electronics, Telecommunications, and Information Technology
"Politehnica" University of Bucharest, *Expected Graduation: 2024*
Specialization: Information Engineering - Bachelor Year 4 (Final Year)

PROFESSIONAL EXPERIENCE

Summer of 2023 | **Assistant Programmer, Intern | AMIQ Consulting**
3-Month paid internship program in Digital Verification. SystemVerilog. UVM. XCelium.
VManager. Git. Gerrit. Code Reviews.
Developed a modular and cycle-accurate test-bench according to a design specification of
an asynchronous FIFO buffer. Ran regressions and acquired complete code and functional
coverage. Congratulated by the employer on my technical prowess and adaptability.
Chose to continue my studies before returning to the job market.

CERTIFICATIONS, LANGUAGES AND SKILLS

- **Certifications:** APTE Certificate of Competence in PCB design (IPC 2221, 2222, 7351, awarded in 2023), member of the Student's Branch Chapter of IEEE's Electronics Packaging Society, member of the CETTI group of the Faculty of Electronics, Telecommunications and Information Technology of "Politehnica" University of Bucharest.
- **Languages :** Romanian (Native), English (Proficient/Native), French (Elementary).
- **Soft Skills :** Adaptability, problem-solving, learning, teaching, communication (InfoEducatie Central Committee member, co-operating with other members, see projects).
- **Programming Languages:** C, C++, C#, Rust, Zig, Python, Bash, Java.
- **Software Engineering:** Meta-programming, OOP, data-oriented design, Linux development, graphics programming, OpenGL, Vulkan, game development, Unity.
- **Hardware Engineering:** Analog and digital circuit design, EDA, CAD/CAM, KiCAD, OrCAD, FreeCAD, Autodesk Inventor, digital circuit verification (UVM, SystemVerilog, XCelium, VManager), analog circuit simulation (LTSpice, PSpice).

PROJECTS

2018, 2020-Present | **InfoEducatie**
"Utility Software" Jury board member, Central Committee member since 2020. Teamwork.
Won 3rd prize in the "Utility Software" category in 2018. Software engineering. C#. Unity.
2023-Present | **"Metaplasia" - Zig Compile-Time Interfaces**
>>> https://github.com/nylvon/metaplasia
Open-source interface system for the Zig programming language. Software engineering. Zig.
2022 and 2023 | **TIE Contest**
Won 3rd place in 2022, then 1st place in 2023. Hardware engineering. CAD/CAM. EDA. KiCAD.
2022-2023 | **Robotic arm using 3 servo-motors with fine control**
Software and hardware engineering project. Embedded programming. C. Optimization.
2023-2024 | **Voice-commanded calculator**
Software engineering project. Python. AI. Data structures. Speech recognition. Fuzzy
logic. Parsing and tokenizing. Interpreter design. Almost Turing-complete.
2022-2023 | **Power Audio-Frequency Amplifier**
Hardware engineering project. Analog circuit design and simulation. PSpice. KiCAD. OrCAD.