

Bilal Eddinaoui

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EDUCATION

1337 Coding School

Khouribga, Morocco

Software Engineering Program, 2023 - Present

Peer-to-peer, project-based program in software engineering with hands-on work in C, C++, Linux, and full-stack development.

PROJECTS

Commodore 64 Emulator (C) - [Github](#) | [Live Demo](#)

- Implemented complete CPU emulation, memory management, hardware timing simulation.
- Developed a debugger which lets you view the contents of RAM, VIC-II registers, CIA 1 and 2 registers
- Ported into the web using WebAssembly.

Ft_Transcendence - Online Multiplayer Gaming Platform (TypeScript, Python) - [Website](#)

- Capable of running multiple games between different users concurrently using Django.
- Offers Complete Users management system with three different authentication methods.
- All run on top of docker using multiple containers for each service.

WebServ - HTTP/1.1 web server (C++) - [Github](#)

- Capable of handling GET, POST and DELETE requests using an event-driven architecture with Kqueue.
- Static file serving and dynamic content generation using CGI with support of (php, py, js, pl, sh) file extensions.
- Support for cookies and session management with two dynamic applications in C++ and Python as examples.

Port Scanner - Ports scanning tool (C) - [Github](#)

- Support the SYN, ACK, FIN, NULL, XMAS, and UDP scans
- Able to identify services by comparing ports and transport protocols to the NMAP services-database
- Provided a set of options to Customize scan behavior like specifying custom TCP flags combinations.

Next Gravity Demo - Physics Simulation (TypeScript) - [Website](#)

- Built an interactive gravity simulation with smooth particle movements.
- Optimized performance for responsive and efficient physics updates.
- Developed using Next.js, TypeScript, Prisma, and SQLite

Trading Client - High-Performance Trading System (C++) - [Github](#)

- Built a real-time order execution and management system for crypto trading.
- Implemented WebSocket-based market data streaming.
- Used the Deribit API to retrieve market data and execute trades.

SKILLS

- **Programming Languages:** C, C++, Python, JavaScript, TypeScript
- **Technologies & Tools:** Git, Docker, Linux
- **Topics:** Software Development, Full Stack Web Development, Network & system administration
- **Languages:** English (fluent), French (pro), Arabic (native)