

Safi Nabwani

Computer Engineering Student | Software, FPGA & Embedded Systems

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EDUCATION

Technion - Israel Institute of Technology

2024 - Present

Computer Engineering | GPA: 83.1 | Expected graduation: 2029

Selected coursework: Combinatorics for Computer Science (95), Introduction to System Programming (89), Digital Systems and Computer Structure, Electrical Engineering Lab A1, Numerical Algorithms.

PROJECTS

FPGA Snake Arcade Game

SystemVerilog | Cyclone V

- Designed and implemented a real-time Snake arcade game with VGA graphics, keyboard input, collision detection, scoring, multiple apple types, audio feedback, and game-state logic.
- Simulated and debugged the design using ModelSim and SignalTap, then synthesized it in Quartus Prime.

Virtual File System

C++ | Object-Oriented Design

- Implemented an in-memory hierarchical file system with directories, text files, symbolic links, recursive search, common file operations, and command history.
- Applied Singleton, Composite, Command, Factory, and Factory Method patterns; used smart pointers and modular class hierarchies for ownership and separation of concerns.

SKILLS

Languages: C, C++, Python, SystemVerilog, MATLAB, RISC-V Assembly

Tools: Git, GitHub, WSL, CLion, Visual Studio, ModelSim, Quartus Prime

Core areas: Data Structures & Algorithms, Computer Architecture, Digital Systems

VOLUNTEERING

Elderly Support Program - Volunteer

2025

Supported elderly individuals through regular visits and conversations, strengthening communication, empathy, patience, and responsibility.

LANGUAGES

Arabic - Native | Hebrew - Native | English - Fluent