

Shim Steven S. Manaloto

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TECHNOLOGIES AND LANGUAGES

C++, Python, C, C#, SQL, HTML, CSS, Flask, Javascript, Visual Studio, Git

PROJECTS

Nintendo Entertainment System Emulator (C++) (github.com/Shim06/Anemoia)

- Developed an NES emulator, emulating the MOS Technology 6502 microprocessor (CPU), the Pixel Processing Unit (PPU), and several NES memory management cartridge hardware
- Integrated audio emulation to replicate NES sound processing, including implementing pulse wave, triangle wave, noise, and DMC channels
- Ensured emulation accuracy and compatibility with over 86% of the official NES game catalog

CHIP-8 Emulator (C++) (github.com/Shim06/Nibbelium)

- Implemented CHIP-8 memory, registers, and instruction fetching, decoding, and execution
- Achieved 99% accuracy and compatibility in emulation through testing with over 100 game ROMs and 8 test ROMs

Raycasting Rendering Engine (C++) (github.com/Shim06/Raycasting-Engine)

- Developed a rendering engine using raycasting techniques, capable of rendering ceilings, floors, walls, and sprites
- Implemented texture loading to map onto ceilings, floors, walls, and sprites

Face Recognition Attendance System (Python) (<https://github.com/Shim06/FRAS>)

- Developed and implemented a face recognition attendance system to monitor the attendance of students/employees with 85% accuracy
- Utilized SQLite as a database to store student/employee information and attendance history

Automated Fishing Bot for Terraria (Python) (github.com/Shim06/Terraria-Fishing-Bot)

- Launched a fishing bot for the game Terraria, garnering over 1,000 downloads from players
- Implemented automatically fishing in the game through image recognition with 95% accuracy

COURSES AND CERTIFICATIONS

Harvardx

CS50x: Introduction to Computer Science

2024

EDUCATION

City College of San Fernando

Accounting Information Systems

2024 – Present