Nathan Guerrero

(949) 490-2862 | anarchbool@anarchbool.dev | anarchbool.dev

EDUCATION

University of California, Irvine - Irvine, CA   Sep 2021-Jun 2025
B.S. in Computer Science, Specialization in Systems and Software

PROJECTS, EXPERIENCE

Sapphic Homelab/Home Server - *Personal Project*   Aug 2024-present
- Architected and administered a comprehensive Proxmox-based homelab, with repurposed hardware to reduce costs
- Provisioned Linux-based virtual machines and Docker containers to host over 13 services, including Home Assistant
- Cultivated practical expertise in virtualization, networking, security, and DevOps principles through hands-on implementation and problem-solving

COMPSCI 121 (Search Engine) Project - *Team Member*   Apr 2024-Jun 2025
- Designed and built a scalable search engine in Python, with a team of 4, capable of indexing tens of thousands of webpages and returning query results in <100 ms
- Architected a multithreaded indexing system with disk-backed databases to efficiently handle high-volume reads/writes
- Developed internal tools and libraries to accelerate development and enforce modularity under OOP principles

Tile-Matching Game Environment - *Team Member*   Feb 2024-Mar 2024
- Created a Python framework, with a team of 5, to provide a customizable environment for building tile-matching games
- Implemented game-specific logic for 2 example games, Dr. Mario and Puzzle Fighter, showcasing the framework's versatility and object-oriented design
- Authored technical documentation and design specifications to facilitate clear communication and development

SKILLS

Programming Languages: Python, C/C++, Java, SQL, HTML/CSS/JS, Bash, Rust
Concepts: Software design, full-stack development, automation, networking, distributed computing, databases, containerization, remote development, systems administration
Software: Linux, Debian/Ubuntu, React, VS Code, Git, Docker, QEMU, Node.js, OpenWrt, SSH