(DANNY) NGUYEN DUONG

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Dannydev.info | GitHub | YouTube | LinkedIn

Professional Summary

Software engineer with comprehensive fundamentals/hands-on experience of low-level languages and operating systems (ie: C and Linux). Adaptable to AI whilst cultivating the imperative foundations of computer science. Lifelong learner and problem solver, excelling in collaborative environments.

Technical Skills

- Fluent: C
- Competent: Linux, Python, Java, Javascript
- Competent: Figma, Webflow for web development
- Competent: MySQL, PostgreSQL, MongoDB
- Bilingual: Fluent in English and Vietnamese

Projects

Node Nexus

- Lightweight, socket-based server in C implementing a custom in-memory database for file management, using low-level systems programming, memory management, and thread-safe operations with pthread mutexes.
- Integrated user authentication with SHA-256 hashing, binary serialization/deserialization, and hash table optimizations for efficient data access, securing data handling and performance optimization.
- Comprehensive command-line interface supporting features such as file compression, sentiment analysis, and admin controls, along with automated testing scripts, building robust, multi-client applications and ensuring reliability through clean shutdown and persistent storage. Deployed on IONOS Virtual Private Server.

Yeager Interpreter

- High-performance bytecode virtual machine in C for the Lox language, incorporating a scanner, Pratt parser, and compiler, showcasing deep understanding of interpreter architecture.
- Enhanced the interpreter with custom features like optimized run-length line encoding and extended switch-case statement support demonstrating optimization techniques and ability to extend complex systems.
- Integrated a mark-and-sweep garbage collector, closures, and native function support, ensuring memory management while maintaining modular, testable code for a user-friendly programming language.

Brink Bitcoin Wallet

- Django-based Bitcoin wallet web application, enabling secure user authentication, hot wallet creation, and transaction history tracking, showcasing Python, blockchain API integration, and full-stack development.

Grappling Dungeon

- Web application to catalog Jiujitsu instructional and competition videos with searchable keywords and custom user notes, built on Python and PostgreSQL.

Experience

Freelance Web/Landing Page Designer   April 2023 - Present
- Customized, attractive designs responsible for 30+% increase in traffic, inquiries, donations/sales.
- Responsive layouts adaptable to all screen resolutions.
- Interactive animations for visual effects.

Employment

Lead Server   Oct 2016 - Present
Gyu Kaku Japanese Grill   HB, CA
Data Entry Associate   Feb 2021 - Mar 2022
Elevated Health   HB, CA

Education

Cal State University, Long Beach - [B.S in Healthcare Administration (Incomplete, 4.0 Cumulative GPA, President's List)](#)
- Developed analytical project management skills over 5 years; pivoted to software to pursue passion for coding.

Coding Dojo - [Three Stack Software Development](#)
- Built full-stack applications using Python, Django, JavaScript, and React.

Stanford University - [Machine Learning Specialization](#)
- Learned and applied algorithms to real-world datasets.