CARLOS RAMIREZ

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Professional Summary

Motivated back-end developer with a solid foundation in programming languages including C, Python, Java, and SQL. Skilled in building logical, data-focused solutions and learning new technologies quickly. Passionate about writing clean, efficient code and developing systems that connect smoothly to front-end applications.

Education and Projects

Bachelor of Science: Computer Science, December 2024

UTAH VALLEY UNIVERSITY – OREM, UT

Compiler Project

Designed and implemented custom compiler for KXI, a simplified Java-like language. Used ANTLR for parsing and AST generation, and implemented lexical analysis, semantic checking, and code generation written in Java. The processor and assembler used to execute the KXI code was written in C and Python respectively.

Various Design Pattern Projects

Multiple projects written in Java that each demonstrate different design patterns, such as strategy, observer, decorator, factory, singleton, visitor, state, and much more.

SQLite Database Project

Designed and implemented a relational database with optimized SQL queries and CRUD operations to manage data efficiently.

Skills

- Experienced in object-oriented programming (OOP)
- Basic understanding in SQL databases and queries
- Programming proficiency in C, C++, C#, Java, Python, SQL, Kotlin
- Version control with Git and GitHub
- Debugging and problem-solving

Work History

Shipping Assistant, 06/2019 to 08/2019

Young Living Essential Oils – Spanish Fork, UT
- Applied strong attention to detail in packaging and logistics to ensure accuracy in order fulfillment.
- Adapted to structured workflows and followed detailed instructions to maintain efficiency.

STEM Ambassador, 08/2016 to 05/2017

Springville High School – Springville, UT
- Introduced middle school students to foundational programming in C#, emphasizing logical thinking and problem breakdown.
- Collaborated with peers to deliver structured lessons that reinforced coding fundamentals.