

LEONARDO OCHOA

Seattle, WA (Open to Remote) | (509) 289-8474 | leo.o47@icloud.com | [linkedin](#) | [portfolio](#)

TECHNICAL SKILLS

Programming languages | Java, C, C++, Python, React, JavaScript, TypeScript, Node.js, OCaml, Racket, Kotlin

Databases | MySQL

Testing Frameworks | JUnit, CUnit, gtest

Version control | Git, npm

PROJECTS

Full-Stack Software Engineer | 333gle

2023

Search engine with web server

C | C++ | CUnit

- Developed and enhanced data structures and search engines in C and C++, which were tested and passed all unit tests, and handled various queries efficiently.
- Applied software engineering principles and practices such as unit testing, Makefiles, and code documentation, which resulted in the data structures and search engines being well-tested, documented, and easy to maintain.
- Implemented a variety of data structures and algorithms, including doubly-linked lists, chained hash tables, file parsers, and inverted indexes, which enabled the data structures and search engines to be efficient and scalable.
- Used TF-IDF and cosine similarity metrics, hashing and chaining techniques, and socket and HTTP utilities, which improved the accuracy and performance of the data structures and search engines.

Back-End Software Engineer | Games-in-One

2023

Store, Sort, and Launch apps within Games-in-One

C++ | gtest

- Orchestrated backend processes for seamless application launches and optimized user interactions through well-designed API endpoints.
- Implemented robust checks for file processes, ensuring data integrity, and efficient backend logic for database interactions.
- Developed and executed comprehensive testing strategies, including unit testing and integration testing, to ensure the reliability and functionality of backend processes.
- Collaborated closely with cross-functional teams, ensuring seamless integration and proactively resolving backend issues through effective problem-solving.

Full-Stack Software Engineer | PathFinder

2022

UW campus PathFinder website

TypeScript | Java | React

- Implemented a graphical user interface (GUI) with React style and web development skills, resulting in a user-friendly and accessible GUI.
- Created a backend server using Spark Java and Gson libraries, achieving a high level of performance and accuracy.
- Tested the application for functionality and error handling, resulting in a high-quality application with few bugs.
- Independently designed and implemented the overall architecture following the model-view-controller (MVC) design pattern, ensuring a scalable and maintainable codebase.

WORK EXPERIENCE

TEACHING ASSISTANT CSE 340: INTERACTION PROGRAMMING

Dec 2022 - Dec 2023

University Of Washington, Seattle, WA

- Led office hours, providing individual and group assistance to students with coursework, assignments, and projects, using active listening skills and offering clear explanations, resulting in improved student understanding and performance.
- Assisted in instructing and developing an in-person course on Interaction Programming, focusing on fundamental abstractions underlying user interfaces.
- Collaborated with course instructors to assess course progress, devise effective strategies for enhancing student learning outcomes, and ensure the course content met the evolving needs of students.
- Facilitated students learning of Java and Kotlin programming for Android devices through personalized guidance, delivering practical support and strategic insights to ensure a thorough understanding of mobile application development.

EDUCATION

University of Washington - Bachelor of Science, Computer Science, GPA 3.7

Sept 2019

- Member of Washington State Academic RedShirt (STARS) - Program that prepares engineering and computer science scholars for success through collaboration, diversity, and core problem-solving skills.