Carlos Aguilera

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EXPERIENCE

Ethika Inc. (E-commerce)   **May 2022 – Present**

Web Developer   Lake Forest, CA

- Led a team to implement a music content management system with talent management, asset tracking, and analytics.
- Optimized image storage reducing page loads by 30%, migrated our state management system, and integrated Klaviyo for email, SMS, and back-in-stock notifications.
- Created and deployed a promotional video game that reached 15,000 users and over 450,000 games played.
- Integrated Algolia search with product pages, aligning complex tagging with Algolia's payload structure and adding a debouncer for smoother user input.
- DevOps: AWS, Docker, and GitHub. Tools: JavaScript, PHP, MongoDB, JIRA, and Linux

EDUCATION

California State University Long Beach   **Aug 2024 – Present**

Computer Science   Long Beach, CA

- Proficiency in mathematics and strong problem-solving abilities for complex computer science and software development challenges.
- Experience with agile methodologies and project management.

Saddleback College Robotics Club   **Jul 2023 – Jul 2024**

Programmer   Mission Viejo, CA

- I spearheaded a project to construct a website for our base station. The website aimed to oversee all feedback from the rover, including real-time camera feed monitoring.
- I developed and oversaw an onboarding program for new members, which improved their understanding of various domains such as autonomous driving using OpenCV and LIDAR sensors.

PROJECTS

El Andariego (Restaurant Website)   **Jan 2024 - Present**

Vue js, MongoDB, Tailwindcss, AWS   San Juan Capistrano, CA

- Implemented internationalization (i18n) in Vue.js for seamless language switching.
- Integrated Square API for online ordering and built an email subscription system for order confirmations.
- Developed cron jobs to update the MongoDB database with new menu items and reusable utility components (image, table, select, calendar).

Point of Sale System (TUI)   **Aug 2022**

C++, Linux, Git, CMake   San Juan Capistrano, CA

- Manual Memory Allocation: following RAII principles
- Move Semantics: for resource optimization and efficient data transfer.
- Deep understanding of managing a larger C++ project

Street Fighter   **Feb 2023 – Jun 2023**

Java, JavaFX, Multithreading, Networking   Mission Viejo, CA

- Implemented multithreading for concurrent gameplay actions, managing game logic separately from rendering, using locks and volatile memory to ensure thread safety and prevent race conditions.
- Established a client-server architecture for players to connect over a network. Implemented data serialization for exchanging game state information between clients and the server.

Graphics Modeler   **Nov 2022 – Dec 2022**

C++, Qt, Linux, CMake, QML   Mission Viejo, CA

- Library for basic 2D graphical objects, focusing on C++ fundamentals.
- Inheritance, aggregation, polymorphism, exception handling, templates, operator overloading, and move semantics.

TOOLS & TECHNOLOGIES

- **Programming Languages**: C++, JavaScript, HTML, PHP, CSS, Java, Python, Rust, Typescript, SQL
- **Frameworks & Libraries**: Bootstrap, Tailwindcss, Vue Js, ROS2, NAV2, Symfony, React Js
- **Technologies:** MongoDB, Git, Linux, AWS, Node, Vim, Docker, Railway
- **Other Skills:** Agile, Leadership, Data Management, Communication, Documentation, Problem Solving, Organization