18aguilerac@gmail.com

Carlos Aguilera

github.com/devloos | www.linkedin.com/in/aguilerac | www.caguilera.dev

EDUCATION

California State University, Long Beach

Expected May 2026

B.S. Computer Science - 3.78 GPA

Long Beach, CA

EXPERIENCE

Full Stack Developer

May 2022 - Present

Ethika Inc. (Vue.js, Symfony, MongoDB, Bootstrap, AWS, Redis, Docker, GitHub Actions)

Lake Forest, CA

- Optimized Algolia search integration, reducing API calls and search costs by 60% while improving response time by 60% for a faster and more efficient user experience.
- Improved page load times by 30% by optimizing image storage and modernized our state management system. Integrated Klaviyo to handle email, SMS, and back-in-stock notifications, boosting customer engagement by 26%.
- Designed and launched a promotional video game that attracted 20,000 players and hit 550,000+ total plays, driving brand engagement in a fun, creative way.
- Led the creation of a music content management system to manage 500+ talent profiles, track over 5,000 digital assets, and provide useful automated reports.
- Enhanced SEO and web performance using Google Lighthouse, improving page speed by 20%, accessibility, and best practices scores by refining lazy loading, eliminating render-blocking resources, and enhancing structured metadata.

Software Developer August 2022 – Present

Nexpa LLC (Vue.js, NestJS, MongoDB, Tailwind CSS, AWS, Google Analytics)

Lake Forest, CA

- Implemented a responsive food truck website with language switching (i18n), Square online orders increasing revenue by 15%, and automated email confirmations, while implementing cron jobs for menu updates and reusable UI components.
- Created and deployed a scalable restaurant website with custom online ordering using Square Payments, leveraging NestJS and REST APIs, establishing CI/CD pipelines, reducing deployment time by 40%, and improving system reliability.

July 2023 - July 2024 **Programmer**

Saddleback College Robotics Club (ROS2, Python, Rust, C++, Vue.js, Django)

Mission Viejo, CA

- Spearheaded the development of a website for the base station to monitor rover feedback, including real-time camera feed integration.
- Developed and managed an onboarding program to enhance new members understanding of autonomous driving, including OpenCV and LIDAR sensor usage.
- Experience with agile methodologies, including leading sprint planning and project management using GitHub Projects

PROJECTS

February 2023 – June 2023 **Scrum Master**

Street Fighter (Java, JavaFX, Multithreading, Networking, Agile Methodologies)

Mission Viejo, CA

- Implemented a multithreaded rendering system to maintain 60 FPS during real-time gameplay.
- Tested over 16 simultaneous players over a network using a client-server architecture with data serialization.
- Maintained thread safety (zero race conditions in the final release) using locks and volatile variables, similar to backend concurrency control techniques.
- Completed 5 sprints under Scrum, delivering and testing features bi-weekly.

Programmer

Point of Sale System (TUI, C++, Linux, Git, CMake)

August 2022 - August 2022 San Juan Capistrano, CA

- Designed and executed a terminal-based POS system in under 2 weeks, featuring auto-complete and random UUID generation without external libraries.
- Applied advanced C++ techniques, including RAII for memory safety, move semantics, reduced copy overhead by 18% in heavy operations, and used built-in and custom STL containers.

TECHNICAL SKILLS

- Programming Languages: C++, JavaScript, PHP, Java, Python, Rust, TypeScript, SQL
- Frameworks & Libraries: Vue.js, Nuxt, React, Bootstrap, Tailwind CSS, Symfony, Django, NestJS, Node.js
- Databases: MongoDB, PostgreSQL, Redis, Supabase
- **DevOps & Tools:** AWS, Vercel, Docker, Railway, Git, Linux, Jira