

Andrew Chan

chanandrew1925@gmail.com | (626) 784-8864 | Riverside, CA | Github | Portfolio

EDUCATION

University of California, Riverside

Riverside, CA

B.S. Computer Science, GPA: 3.82/4.00

September 2024 – June 2028

- Coursework: Data Structures & Algorithms, Software Construction, Database Systems

PROJECTS

Drive-S3 Image Backup | *Node.js, SQLite, AWS*

- Built an automated Google Drive to Amazon S3 photo backup tool to help my family store images reliably while reducing long-term storage costs by 80%.
- Implemented a Drive crawler and streaming upload pipeline that transfers image files directly to S3 without local intermediate storage, preserving folder structure and skipping unchanged files.
- Designed a lightweight SQLite metadata layer to track uploaded files and versions, enabling incremental backups, safe re-runs, and detection of file changes over time.

PantryChef | *Node.js, Express, PostgreSQL, React, Tailwind CSS*

- Built a full-stack web application that lets users track pantry inventory and generate personalized recipes.
- Designed and implemented a relational database schema and RESTful APIs with validation and error handling, and connected them to a responsive frontend.
- Developed a secure backend with user authentication, protected routes, and user-scoped CRUD functionality for pantry items and saved recipes.

Discord AI Conversation Bot | *Python, Ollama, Claude API*

- Built an asynchronous Discord chatbot supporting both local LLMs (Ollama) and cloud-based models (Claude), with configurable backend selection.
- Designed a two-stage response pipeline (rule-based filtering followed by LLM evaluation) with context window.
- Developed a modular persona system using YAML-based configuration, enabling character behavior changes without modifying application code.

Spotify Playlist Creator | *JavaScript, HTML, CSS*

- Developed a web app that generates personalized playlists based on selected songs, genres, and filters.
- Added functionality for users to view their Spotify listening statistics, including top tracks and artists.
- Integrated secure user authentication with Spotify Web API through PKCE OAuth flow to access user data, directly uploading and saving playlists to user accounts.

EXPERIENCE

Tech Lead

February 2026 – Present

Highlander Builders Initiative

Riverside, CA

- Wrote technical specifications detailing core features, database schema, and planned API endpoints to align the team prior to implementation.
- Selected the tech stack and organized the application into clear frontend, backend, and database layers.

Math Tutor

September 2022 – June 2024

South Hills High School

West Covina, CA

- Tutored peers in AP Calculus AB/BC and supported underclassmen with homework by breaking problems into clear, logical steps, improving conceptual understanding and problem-solving skills.
- Led group study sessions to review core topics and reinforce understanding through guided practice problems, helping students prepare effectively for exams.

TECHNICAL SKILLS

Languages: Python, C++, Javascript, TypeScript, SQL, HTML, CSS

Frameworks / Libraries: NodeJS, Express, React, Jest, Tailwind CSS

Databases: PostgreSQL

Tools: Git, GitHub, Ollama, VSCode, Vite, npm