

Axl Allan Tan

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Education

California State University, Long Beach

August 2021 - May 2025

Bachelor of Science in Computer Science - GPA: 3.81/3.85

- Courses: Software Engineering, Machine Learning, Artificial Intelligence, Distributed Networks, Operating Systems, Computer Architecture, Algorithms and Data Structures

Technical Skills

Languages: Python, Swift, JavaScript, TypeScript, HTML5, CSS, SQL

Frameworks/Libraries: React, NextJS, TailwindCSS, Express, Prisma, NodeJS, PostgreSQL

Developer Tools: Git, VSCode, XCode, Firebase, Vercel, npm, Figma, Prisma Studio, Notion, Trello

Projects

Tankōbon | Next.js, TypeScript, Tailwind CSS, Prisma, PostgreSQL, Neon

- Developed a **full-stack** manga library management web application using **Next.js 14** and **TypeScript**, enabling users to track their manga collection, reading progress, and owned volumes with a modern, responsive interface.
- Integrated the **Jikan API** (MyAnimeList) to dynamically fetch and display manga information, including search functionality with advanced filters for type, status, and popularity sorting.
- Designed and implemented the **frontend** with **Tailwind CSS**, creating an intuitive user interface with features like status tracking, progress management, and collection visualization through interactive charts and cards.
- Built a secure **authentication system** using **NextAuth.js** with credentials-based login, implementing JWT strategy for session management and user data protection.
- Architected the **backend** with **Prisma ORM** and **PostgreSQL (Neon)**, designing **normalized database schemas** for users, library entries, and session management with optimized queries to prevent performance bottlenecks.
- Deployed the application on **Vercel** with continuous integration, implementing production-ready **error handling** and **performance optimizations** that resolved HTTP 431 errors through efficient session management.

Roulee | Swift, XCode, Firebase

- Led a **team of 5 developers** to design and deliver an iOS mobile application that helps users decide **where to eat** through **interactive, game-like features** and real-time restaurant suggestions.
- Integrated the **Google Places API** to dynamically fetch and display nearby restaurant options based on user location and preferences.
- Designed and implemented the **frontend** in **Swift (Xcode)**, creating a playful and intuitive user interface that enhances decision-making through gamification.
- Helped maintain the **backend** using **Firebase** (Authentication, Firestore), enabling real-time data storage and seamless user session management.
- Managed project workflows with **Trello** for **sprint planning** and **backlog grooming**, ensuring timely feature delivery and effective team collaboration.

Stash | Node.js, React.js, npm, Firebase, Bootstrap

- Developed a responsive cloud web application with **React.js** and **Bootstrap** for efficient file upload, categorization, and management.
- Implemented secure user authentication and real-time database synchronization using **Firebase** with **Bootstrap** components for enhanced UI elements.
- Built backend services with **Node.js** to handle API requests, file processing, and server-side logic.
- Collaborated with a team, utilizing **Github** for version control, to increase app functionality and received positive user feedback from instructors.