

Charles Milton

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SUMMARY

Software Engineer with experience at **Amazon** and **CSULB**, skilled in backend, cloud, and full-stack development. Strong in **Java**, **Python**, and **JavaScript** with a track record of building scalable, user-focused solutions and improving system reliability.

EXPERIENCE

Software Developer

Associated Students Inc. at CSULB

August 2025 - Present, Long Beach, CA

- Replaced 22WestMedia's Issuu digital-magazine hosting (third-party platform, \$500/month) by building a custom flipbook solution and an admin dashboard for uploads/metadata with **React**, **Node.js**, **Cloudflare R2**, and **MongoDB**, which **eliminated hosting costs by 100%** and improved access for thousands of readers.
- Maintain and enhance ASI's web platforms to ensure accessibility, reliability, and performance for **40,000+ students**.
- Develop responsive websites supporting student programs and events, improving engagement across campus.

Software Development Engineer Intern

Amazon

May 2025 - August 2025, Bellevue, WA

- Developed and integrated an **AWS-native service** in **Java** to correct retail inventory misclassification in fulfillment centers, **reducing cost data inaccuracies by ~80% across multiple regions**, with **AWS CloudWatch** leveraged for metrics tracking, monitoring, and performance optimization.
- Authored internal documentation** for the new service, improving onboarding and knowledge sharing across engineering and accounting teams.
- Collaborated with two engineers to **resolve a Sev-2 incident impacting 1,700+ transactions** by creating a hotfix that restored system stability and data integrity.

Software Engineer Intern

DreamWay Media

September 2024 - December 2024, Glendale, CA

- Replicated designer mockups from **Figma** into fully functional, responsive web pages using **PHP** and **React**, ensuring perfect implementation.
- Refactored core modules of e-commerce applications, **improving performance scores by 30%** as measured by standardized tools.
- Incorporated **Docker** to containerize the development environment for a **5-person team**, enabling cross-OS consistency, faster onboarding, and reducing environment-related bugs.

PROJECT

TurnTalks | AI-Powered Discussion Platform (Next.js, React, Supabase, OpenAI API, Tailwind CSS)

www.turntalks.com/ • April 2025 - April 2025

- Designed automated guided discussion sessions for a **30+ member book club** using **Next.js** and **React**.
- Integrated real-time features with **Supabase** and **OpenAI API TTS** to enable speech transcription and audio playback.

CSULB Schedule Generator | Web App (Flask, AWS Lambda, Redis, Supabase, Tailwind CSS)

csulb-schedule-generator.vercel.app/ • March 2025 - March 2025

- Built a course schedule generation app with **Flask** and **Tailwind CSS**, featuring filters by professor, time, and day.
- Automated **real-time data scraping** with **AWS Lambda** and **Supabase**, optimized performance with **Redis caching**, and integrated RateMyProfessor ratings using **GraphQL**.

Rate My CSULB Professors | Chrome Extension (HTML, CSS, JavaScript)

chromewebstore.google.com/detail/rate-my-csulb-professors/hfacilllhfjdaakmhmdbkidcibhoco • December 2024 - December 2024

- Engineered a Chrome extension that integrates professor ratings into CSULB's course registration platforms, gaining **300+ active users** by solving a key student pain point.
- Implemented **GraphQL APIs** and a 200-entry LRU caching system, **reducing query latency by up to 50%** and enhancing real-time data retrieval.

EDUCATION

Computer Science

California State University Long Beach • Long Beach, CA • 2026

- Relevant Coursework:** Data Structures, Algorithms, Object-Oriented Programming, Databases, Software Engineering, Operating Systems, Machine Learning, Artificial Intelligence, Distributed Networks and Computing,

INVOLVEMENT

Full-Stack Developer

California State University Long Beach • Association for Computing Machinery • August 2024 - August 2025

- Built the ACM website with **Next.js**, **MongoDB**, **GCP**, and **TailwindCSS**, centralizing event updates and resources for **500+ members**.
- Enhanced the **BeachHacks** hackathon platform by integrating user-driven features and refining UI components, helping the event surpass **300+ applications** (50% above capacity).

Full-Stack Developer & Project Lead

California State University Long Beach • XR Engineering Club • September 2023 - August 2025

- Developed and maintained the club website using **Next.js**, **Supabase**, **GCP**, and **TailwindCSS**, automating event updates and email notifications for **100+ members**.
- Led the development of an **AR Cooking Simulator** using **Unity** and **AR frameworks**, showcased at the **Senior Project Expo** and selected by the **CSULB ISPACE Lab** for further collaboration.

SKILLS

Languages: Python, Java, TypeScript/JavaScript, C++, C#, PHP, HTML/CSS

Frameworks/Tools: React, Next.js, Node.js/Express, Flask, Tailwind CSS, Docker, Git/GitHub, CI/CD, Postman, JUnit

Cloud/Databases: Amazon Web Services (Lambda, DynamoDB, S3, CloudWatch), Google Cloud Platform, PostgreSQL,

MySQL, MongoDB, Firebase, Supabase, Neo4j, Redis, GraphQL