Charles Milton

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EDUCATION

California State University, Long Beach | Long Beach, CA

Major: Computer Science Expected Graduation: May 2026

Relevant Coursework: Data Structures, Algorithms, Object-Oriented Programming, Software Engineering, Operating

Systems, Machine Learning, Artificial Intelligence

Organizations: Full-Stack Developer for the Association for Computing Machinery (500+ members) and XR Engineering Club, driving web platform development and supporting student engagement initiatives.

EXPERIENCE

Associated Students Inc. at CSULB

August 2025 - Present

Software Developer

- 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.
- Leading modernization efforts by migrating outdated platforms to React and AWS-based solutions for long-term scalability.

Amazon May 2025 - August 2025

Software Development Engineer Intern

- Developed and integrated an AWS-native service in Java to correct retail inventory misclassification in fulfillment centers, reducing cost data inaccuracies by 82% in North America and 23% in Europe, with AWS CloudWatch leveraged for metrics tracking, monitoring, and performance optimization.
- Delivered project ahead of schedule and optimized performance, improving financial reporting for all 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.

DreamWay Media

September 2024 - December 2024

Software Engineer Intern

- Restructured and upgraded existing e-commerce architecture with PHP and React, resulting in a 30% improvement
 in website performance score, which was the highest on record.
- Incorporated Docker to containerize the development environment for a 5-person team, enabling cross-OS consistency, faster onboarding, and reducing environment-related bugs.

PROJECTS

<u>TurnTalks</u> | Al-Powered Discussion Platform (Next.js, React, Supabase, OpenAl API, Tailwind CSS) April 2025

• Enabled 30+ member book club to host automated guided sessions with auto-generated prompts, real-time speech transcription and audio playback via OpenAl's TTS, leading to an 80% increase in member participation.

CSULB Schedule Generator | Web App (Flask, AWS Lambda, Redis, Supabase, Tailwind CSS) March 2025

 Developed a tool that generates course schedules. Built in Flask, it scrapes real-time course data (stored in Supabase via AWS Lambda), applies filters (professor, time, day), uses Redis caching with in-memory fallback, integrates RateMyProfessor ratings via GraphQL, and features interactive Tailwind CSS calendars.

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

December 2024

- Engineered a Chrome extension that integrates professor ratings into CSULB's course registration platforms, gaining 200+ 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.

TECHNICAL 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