

Mohammed Alsheikh

Riverside, CA

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EDUCATION

California Baptist University

Bachelor of Science in Software Engineering

Riverside, CA

Expected May 2026

- Honors: Provost's List (Spring 2024)
- Relevant Coursework: Data Structures (C++), Operating Systems, Database Management (SQL), SDLC

TECHNICAL SKILLS

Languages: Python, SQL, C++, Java, Swift, Dart (Flutter), JavaScript, HTML/CSS

Frameworks: React, Node.js, Firebase, Flutter, PyTorch, TensorFlow, Scikit-learn

Tools: Visual Studio, VS Code, Git/GitHub, Docker, AWS, REST APIs, Agile/Scrum, CI/CD

Hardware: Embedded Systems (Raspberry Pi 5, ESP32), I2C/I2S Sensors

EXPERIENCE

Software Engineering Intern

Soundtrack

May 2025 – Aug 2025

Remote / Riverside, CA

- Engineered the core architecture of a cross-platform social application in an **Agile/Scrum** environment, following the full **Software Development Life Cycle (SDLC)**.
- Designed scalable **database schemas** and backend infrastructure using Firebase (NoSQL) and **SQL** concepts to ensure data integrity for user profiles and content feeds.
- Integrated third-party RESTful APIs (Spotify) to fetch and render real-time track metadata and audio previews.
- Developed engagement features including a friend system, push notifications (FCM), and real-time messaging.

Capstone Team Lead & Software Engineer

California Baptist University

Sep 2025 – Present

Riverside, CA

- Leading the engineering of wearable smart glasses that provide real-time scene narration for visually impaired users.
- Backend & Data Analysis: Designed a **Relational Database (SQL)** to store device telemetry and error logs.
- Wrote complex **SQL queries** (Joins, Aggregations) to analyze detection accuracy and battery efficiency.
- Implemented on-device object detection with YOLOv8 and VL53L1X time-of-flight sensors to estimate distance.
- Built an offline OCR pipeline (EasyOCR/Tesseract) to read signs and menus aloud without internet access.

Resident Advisor (RA)

California Baptist University

Aug 2024 – Present

Riverside, CA

- Support 35+ residents with conflict resolution, safety response, and community-building events.
- Created communication workflows to improve resident experience and facilitate access to campus resources.

PROJECTS

Lancer Arms App | Swift, Firebase, iOS

- Built a student housing iOS app featuring real-time chat, safety alerts, and resource information.
- Integrated Firebase Authentication and Firestore to support secure messaging and emergency broadcasts.

AI Study Buddy Chatbot | Python, NLTK, Scikit-learn

- Developed a study assistant chatbot using classical NLP to help students review course material.
- Utilized keyword extraction and sentiment/intent analysis to generate context-aware responses.

Data Structures Implementation | C++, Visual Studio

- Implemented core data structures (Linked Lists, Binary Search Trees, Hash Maps) using **C++**.
- Optimized memory management using pointers and destructors to prevent memory leaks in high-performance algorithms.

INVOLVEMENT & CERTIFICATIONS

Formula SAE EV Team: Developed embedded software tools and data collection scripts for EV performance.

Certifications: IBM Data Science Specialization (Feb 2024), Apple Privacy & Security Workshop (July 2023)

Volunteering: Web Tech Support at Fellowship Baptist Church (Oct 2023 – Present)