# Akshat Sohal

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#### **EDUCATION**

San Francisco State University

San Francisco, CA

### Bachelor of Science in Computer Science with Minor in Biology | GPA: 3.85

12/2023

**Relevant Coursework:** Full-Stack Software Engineering, Database Management in MySQL, AI and ML Algorithms, Linux Operating Systems and C, Computer-Human Interaction, Data Structures, Statistics in CS, MIPS programming

#### **SKILLS**

Programming Languages: Java, JavaScript, Python, C

Data Analytics: Python libraries ( scikit-learn, yfinance, Pandas, Matplotlib, NumPy), MySQL

Machine Learning: Python libraries (PyTorch, TensorFlow, OpenCV)

Full-Stack Web Development: JavaScript, React, Flutter, Node.js, NGINX, AWS, HTML, CSS and Bootstrap Database

Management: MySQL, MongoDB, Firebase

DevOps: Linux, Git (version control), NGINX (web-server management), AWS (Amazon Cloud Services)

Software Development Lifecycle: Agile, Scrum, Market Analysis, Case Studies, UI/UX Testing, Code review and Document writing

#### WORK EXPERIENCE

Laavaan

San Francisco, CA 01/2024 - Present

Software Engineering Intern
Collaborated with the Engineering Team on server-side development using Express.js and Firebase

- Leveraged CDN JS and Cloudflare, resulting in a 20% reduction in load times for the web application
- Improved web app's UX/UI using Flutter, reducing the onboarding failures by 25%

San Francisco State University

San Francisco, CA

#### Undergraduate Researcher | Mobile and Intelligent Computing Laboratory

05/2023 - 12/2023

- Coordinated with research PI and graduate students to optimize exo- glove's real-time object detection
- Deployed APIs for image segmentation and classification which enhanced device precision by 25%
- Presented research at the Genentech Scholars Symposium highlighting enhancements achieved by using AI

## **Computer Science Tutor | METRO Program**

05/2022 - 03/2023

- Taught introductory Java and Python to 30+ college freshman, boosting test scores by 30%
- Provided visual learning resources and customized handwritten notes that enhanced learning outcomes by 25%
- Mentored 20 students in SF State's most challenging Data Structures and Algorithms class achieving a 100% passing rate

#### **PROJECTS**

## Team Lead for Full-Stack Tutoring Web Application | GitHub

08/2023 - 12/2023

- Led a team of 6 in developing a tutoring platform for SFSU students from project planning to deployment
- Managed project lifecycle, defined development roadmap, and mastered a tech stack including React, Express, and JavaScript
- Contributed to backend development by integrating database tables, search, login, and session management
- · Ensured meticulous documentation of technical specs, system architecture, market analysis, use cases, and testing procedures

### FAT File System Development in C (Group Project) | GitHub

08/2023 - 12/2023

- · Led a team of 4 to develop a file system in C implementing volume formatting, directory structure, and memory management
- · Implemented core shell utilities (eg. ls, cat, touch) to enhance the file system's management capabilities and UI
- · Contributed to the project's documentation and GitHub, detailing the design, challenges, and functionalities

## **Eco-Friendly Transportation Database and Discord Bot Project | GitHub**

01/2023 - 05/2023

- Designed and deployed an Eco-Friendly Transportation database with a user-friendly Discord bot interface
- Spearheaded the end-to-end development from conceptual design (ERD) to cloud-based implementation
- Leveraged Amazon Database Service and Replit for effective deployment of the Discord bot on the server

#### **LEADERSHIP**

- Genentech Foundation Scholar (2023): Received a merit-based scholarship to pursue research in Machine Learning
- Founder Sikh Cultural Association (2019-2023): Founded SF State chapter leading to a 200% growth in members
- President AI Club (2021-2023): Led a team of 7 students to organize events and talks related to AI