# Mohamad (Mo) Abdi

206-602-8234 | abdimoh596@gmail.com | mohamadabdi.site | linkedin.com/in/abdimoh | github.com/abdimoh596

#### **Education**

University of Washington, B.S. in Computer Science

Sept 2022 - Sept 2024

- Relevant Coursework: Data Structures and Algorithms, Computer Graphics, Systems Programming, Software Design and Implementation, Data Management (SQL), Hardware/Software Interface, Computer Security, Linear Algebra, Discrete Mathematics, Probability/Statistics
- Activities: Member of UW COM<sup>2</sup> Computer Science Club, Persian Circle at the University of Washington

## **Technologies**

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

Frameworks/Libraries: React, REST APIs, Node, Flutter, OpenCV, Java Spring

Developer Tools: Git, Linux/UNIX, Terraform, AWS, VS Code, Unity, Adobe Creative Cloud

## **Experience**

#### **Software Engineer Freelance/Personal Projects**

June 2022 - Present

- Designed and deployed 2+ full-stack web and mobile applications using React and Flutter
- Integrated authentication across multiple apps using OAuth, securing access for 100+ test users.
- Developed CI/CD pipelines using GitHub Actions to automate deployment workflows, reducing manual effort by >80%

#### Software Development Engineer Intern, Amazon – Seattle, WA

June 2024 - September 2024

- Migrated critical **cluster metadata** for the North America region from a legacy system to **AWS Aurora**, supporting over **500B+ transactions daily**, improving system consistency and scalability
- Reduced query latency by 45% by re-architecting storage schema and indexing strategy, decreasing average response time from  $120ms \rightarrow 66ms$ .
- Designed scalable solutions to manage metadata across 10,000+ server partitions and endpoints, ensuring optimized data access and efficient load balancing.
- Collaborated cross-functionally with a team of 7+ engineers using Agile methodologies to deliver Sable's SLAs for high availability, distributed consistency, and system durability.

Software Developer, S.E.A.L Lab – University of Washington

October 2021 – January 2022

- Built a **computer vision** mobile app in **Java/Python** for colon cancer patients to measure medical device dimensions, contributing **500**+ lines of code.
- Optimized image processing algorithms, improving performance by 25% and enhancing responsiveness.
- Collaborated with engineers and professors to deliver features on schedule, achieving 95% on-time completion

### **Projects**

Github Repository Analysis with LLM | Java, Spring, OAuth2, Docker, OpenRouter, GPT

May 2025 - July 2025

- Built and deployed an AI-powered explanation platform handling 100+ user queries/day, integrating OpenRouter's LLM APIs with Spring Boot REST services and secured GitHub OAuth2 authentication.
- Optimized Dockerized deployment pipelines, reducing container build and startup times by **35**%, enabling rapid releases to Render and ensuring consistent production availability.

#### Music Recommendation/Discovery App | Flutter, Dart, REST, Node

January 2025 - March 2025

- Developed in **Flutter** with Spotify integration surfacing **90+** personalized recommendations per user session using **custom REST APIs**
- Built API layer to process 6+ real-time user actions (like/dislike, audio preview, skip), optimizing for responsiveness.

**Group Activity Planning Platform** | JavaScript, Terraform, HTML, AWS, React

January 2024 - March 2024

- Engineered with live polling and calendar sync; backend handled up to 100 concurrent planning events using AWS.
- Deployed infrastructure as code via **Terraform**, improving provisioning time by **60**%, shipped MVP in **under 10** weeks.