Amritvir S. Randhawa

Lacaria

Lasaria Washington D.C., (Remote)

Software Engineer

Jan 2024 – Present

- Developed a full-stack music streaming platform using React Native and AWS (Cognito, DynamoDB, S3) by implementing secure RESTful APIs, optimizing user authentication and profile management for seamless cross-platform usage.
- Implemented advanced UI for artist/listener profiles by integrating React Native components with efficient DynamoDB queries, enabling CRUD operations with 90% faster data retrieval and 35% improved user interaction.
- Created comprehensive dashboard analytics by leveraging DynamoDB GSIs and AWS Lambda to efficiently track follower
 metrics, top tracks, and geographical popularity, providing artists with actionable insights.
- Engineered social engagement features, such as dynamic posts and real-time like/comment tracking, using
 WebSocket-based real-time data synchronization for an interactive user experience.
- **Developed** a secure authentication system using **OAuth** and **JWT tokens** by integrating **Cognito's** user pools and implementing role-based access control, improving system efficiency by 40%.
- **Designed** scalable **microservices** architecture with **Node.js** and **AWS Lambda** by modularizing services for authentication, data analytics, and media handling, resulting in a 30% increase in user engagement.
- **Utilized Figma** for **UI/UX** design and integrated **Expo** into the development **pipeline** to streamline **cross-platform mobile** development, ensuring consistent branding and usability across devices.

PROJECTS

Docomo - Full Stack Web App | *Next.js, React.js, Firebase, TailwindCSS, NextAuth Individual*

August 2023

<u>Link</u>

- Architected a secure document storage solution using React.js & Firebase, adding advanced security for sensitive document
- Developed **intelligent document detection system** using **Tesseract.js** to automatically identify and protect sensitive documents like passports and green cards.
- Created proactive expiry tracking mechanism, multi-tiered notification system, alerting users before document expiration.
- Implemented granular security controls, including folder lock/unlock & optional password protection for critical documents.
- Overcame key challenges in ML-based document analysis and encryption tech, demonstrating complex problem-solving.

Fridge - Food Expiry Tracker Web App | Django, Python, SQLite

Snapix - Social Media Photo-Sharing Android App | Flutter, Dart, Firebase

August 2022

Team Member

Link

- Designed comprehensive **food management** with **Django** & **Python**, addressing food waste, inventory tracking challenges.
- Developed intelligent expiry tracking feature with color-coded status and automatic sorting of food based on freshness
- Implemented expense tracking, enabling users to track and analyze food waste expenditure through dynamic charts.
 Created a real-time web notification system to provide instant updates on food conditions and potential waste
- created a real time web normalism system to provide instante aparties on root conditions and potential waste

• Engineered complex algorithms for data synchronization, expense calculation, and dynamic front-end rendering.

Team Member

July 2022

Link

- Built social media application using Flutter and Firebase, focusing on efficient photo sharing and user interaction.
- Comprehensive social features including photo uploading, commenting, liking, popularity-based home feed algo.
- Optimized mobile application performance through strategic Firebase storage management, efficient data handling
- Developed intuitive user interface that enables seamless photo sharing and social interaction across mobile platforms
- Demonstrated expertise in cross-platform mobile development, real-time DB integration, mobile UX/UI design.

SKILLS

- Programming Languages: JavaScript | TypeScript | Python | Kotlin | Dart | C++ | C | SQL
- Frontend Technology: React.is | React Native | Next.is | HTML | CSS | TailwindCSS | Redux | ¡Query
- Backend & Cloud Development: Node.js | Express.js | AWS | DynamoDB | Firebase | REST APIs | MongoDB | SQL
- Others: Git | GitHub | Linux | Jenkins | Jest | Expo | Team-Collaboration | Problem-Solving | Agile | SCRUM

EDUCATION

California State University of Chico

Chico, California

Bachelor's Degree in Computer Science

Aug 2021 - Dec 2023

o 1-time Dean Honor Award with a 3.7 GPA