Alokkumar Rathava

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Result-driven Android Developer with 3+ years of expertise in Java and Kotlin, Jetpack Compose, and Android SDK, delivering scalable, high-performance mobile applications. Proficient in MVP/MVVM architecture, RESTful API and SOAP integration, and mobile security (OAuth 2.0, Android Keystore, data encryption). Experienced in unit testing (JUnit, Expresso, Robolectric) and CI/CD pipelines for automated deployment. Spearheaded the design of high-performance mobile applications using Java and Kotlin, achieving a 40% improvement in app load times through efficient architecture practices with MVP/MVVM frameworks.

TECHNICAL SKILLS

- Android Development: Kotlin, Java, Jetpack Compose, Android SDK, and Material Design.
- Architecture & Design Patterns: MVP/MVVM, Clean Architecture, and Dependency Injection (Dagger/Hilt), Object Oriented Programming, software design patterns.
- Networking & APIs: RESTful APIs, SOAP Concepts, Retrofit, Volley, WebSockets, and GraphQL.
- Security & Data Protection: Android Keystore, OAuth2.0, OpenID, Data Encryption.
- Testing & Debugging: Unit Testing (Junit, Mockito), UI Testing (Expresso, Robolectric).
- Performance Optimization: Android Profiler, Firebase Performance Monitoring.
- CI/CD & DevOps: Bitrise, Jenkins, GitHub Actions.
- **Development & Collaboration:** Agile (Scrum/Kanban), Git, Code Reviews, Cross-functional teamwork (Product, UI/UX, Backend, QA).

PROFESSIONAL EXPERIENCE

Android Developer | Global DWS Corporation | January 2024 - Present

- Collaborated closely with product owners, UI/UX designers, and QA teams using Agile
 Methodologies throughout the Software Development Life Cycle to refine requirements, conduct
 design reviews, and ensure seamless delivery of application features.
- **Developed and deployed an Android-based social engagement application** for robot-assisted care in senior homes, improving resident interactions and overall quality of life.
- Designed and implemented an intuitive UI/UX tailored for elderly users, ensuring accessibility with large fonts, voice commands, and simplified navigation using Android libraries and Material Design principles.
- Integrated face recognition and speech recognition features to enable residents to engage in personalized conversations.
- Implemented advanced robotic navigation capabilities using SLAM SDK and additional navigation SDKs, allowing robots to autonomously navigate care home facilities while avoiding obstacles.
- **Secured application data** by implementing OAuth authentication and data encryption, ensuring compliance with industry best practices and data protection regulations.
- Successfully deployed in multiple senior care facilities, including Trinity Village and Ivan Franko homes, demonstrating significant improvements in resident engagement and facility operations.

Seneca College | Information Technology Specialist | August 2022 - December 2023

• Implemented technical support within flexible learning environments, ensuring reliable operation of Linux-based systems and networked infrastructure.

Enlighten Infosystems Pvt LTD | Junior Android Developer | December 2020 - August 2021

- Developed Android applications using Java and Kotlin, ensuring efficient UI rendering and data synchronization.
- Integrated SOAP/RESTful APIs via Retrofit, handling large datasets efficiently.
- Implemented MVP/MVVM architecture, improving modularity and maintainability.
- Architecture & Design Patterns: MVP/MVVM, Clean Architecture, Dependency Injection (Dagger/Hilt),
 Object Oriented Programming, Android application architecture, software design patterns
- Optimized app launch speed by 50% using background threading (Coroutines).

EDUCATION

Seneca Polytechnic – Toronto, Canada | Diploma in Computer Programming | Jan 2022 – Dec 2023

Coursework: Android Development, Object-Oriented Design, Algorithms & Data Structures, Java.

The Maharaja Sayajirao University of Baroda – India | Diploma in Computer Engineering | Aug 2017 – Apr 2020

Coursework: Android Development, Networking, Operating Systems, Java and Kotlin.

PROJECTS

Senior Care Social Engagement & Autonomous Navigation Application (GlobalDWS)

- **Tech Stack:** Kotlin, Jetpack Compose, Android SDK, SLAM SDK, Speech recognition, Face Recognition, Retrofit, Firebase, OAuth2.0.
- **Developed and deployed a robot-assisted Android application** for senior care facilities, leveraging Al-driven interactions to enhance resident engagement.
- Implemented an intuitive, accessible UI/UX (large fonts, voice commands) and SLAM SDK-based navigation for autonomous robot movement and obstacle avoidance.
- Integrated face recognition and speech-to-text for personalized user experiences, securing data with OAuth 2.0, Android Keystore encryption, and Firebase security rules.

Eat-Treat E-commerce Application with Secure Payment & AI-Powered Food Recommendation

- **Tech Stack**: Java, Jetpack Compose, Android SDK, Firebase, Flask, Python, SciKit-Learn, ML Kit, Retrofit, OAuth2.0, Android Keystore, Room Database, Google Map SDK, Google Pay API, NFC, Stripe.
- Developed an **Al-powered campus canteen e-commerce platform,** offering secure food ordering, real-time tracking, and intelligent meal recommendations.
- Built a **custom recommendation model** using Flask and Scikit-Learn, deploying via a Pickle (pkl) file for efficient integration.
- Implemented secure **payments with** Stripe and Google Pay (Android Keystore, OAuth 2.0) while leveraging Google Maps SDK for real-time delivery and pickup tracking.