

SUMMARY

Software Engineer with 3+ years of experience delivering high-impact applications and services across mobile and backend systems. Proficient in designing, developing, and optimizing scalable solutions with a focus on performance, reliability, and clean architecture. Skilled in modern development practices including microservices, CI/CD, and cloud integration. Strong problem-solver with experience translating complex business requirements into efficient, maintainable code. Actively seeking new challenges in fast-paced product engineering environments to broaden technical expertise and contribute to large-scale, customer-facing platforms.

WORK EXPERIENCE

TRIMBLE INC. (Product MNC)	Software Engineer L2	Jul 2022 – Aug 2025
<ul style="list-style-type: none">Engineered Kotlin-Based Android Applications: Designed and developed high-quality Android applications using Kotlin and released to PlayStore, serving over 100,000 global users across agriculture, construction, and geospatial domains.Implemented Modern Architectures: Architected scalable, maintainable apps using MVVM and MVI patterns, leveraging ViewModel, LiveData, Navigation components, and unidirectional data flow.Optimized UI/UX with Jetpack Compose: Led the migration of XML-based layouts to Compose, implementing robust state management and lifecycle awareness, resulting in 40% faster UI development and enhanced responsiveness.Integrated Third-Party APIs and Firebase: Worked with RESTful APIs, Retrofit, OkHttp, and Google Play Services to deliver seamless user experiences, boosting user engagement metrics by 15%.Ensured App Performance and Stability: Diagnosed and fixed ANRs, memory leaks, and crashes; implemented multithreading with Coroutines for background tasks to ensure the application remains responsive.Modernized Legacy Codebase: Migrated older applications to Kotlin and Jetpack Compose, applying Clean Architecture, SOLID Principles, and DI frameworks (Hilt/Dagger), resulting in a significant reduction of crash reports and enhanced maintainability.Practiced Agile Methodologies: Actively contributed to sprint planning, daily stand-ups, and retrospectives to drive iterative development and ensure on-time feature delivery in a fast-paced environment.Testing and Code Quality: Ensured high code quality through unit testing (JUnit), UI testing (Espresso, MockK, Mockito), rigorous code reviews, and adherence to CI/CD best practices.Enhanced CI/CD Pipelines: Established automated pipelines using GitHub Actions, AWS, and Bamboo for building, testing, and deploying Android apps, increasing release velocity by 20%.Collaborated with Cross-Functional Teams: Worked closely with product managers, designers, and backend engineers (US, Germany, Finland) to define, design, and ship new features, ensuring clear communication and project alignment across international time zones.Leveraged AI-Assisted Development: Utilized tools like Cursor AI, GitHub Copilot, and ChatGPT to accelerate feature delivery and reduce onboarding ramp-up time by 30%.		

EDUCATION

B.Tech, Computer Science and Engineering (CGPA: 9.66/10) Sree Chitra Thirunal College of Engineering, Kerala (APJ-KTU)	2018 – 2022
<ul style="list-style-type: none">Graduated as branch topper in final university exams.Finalist, Kerala Reboot Hackathon – ASAP and Govt. of Kerala (2020)Winner, All India IEEE Eureka Flyer STEM campaign in 6 high schools (2019)Served as Joint Secretary in IEEE Student Branch and organized programming workshops and technical events.	

KEY PROJECTS

- Trimble Data Manager** (Play Store)
Led development of a Kotlin-based data manager, a unified platform for file operations across multiple Trimble apps. Architected the app using MVI for maintainability and scalability, utilizing Android Jetpack components. Implemented Storage Access Framework (SAF) and multi-threaded services to publish it as a system application.
Skills: Kotlin, Jetpack Compose, MVI, Hilt, Coroutines, WorkManager, Flow, Android Testing, Material Design
- Trimble Perspective Mobile** (Play Store)
Migrated a companion app for 3D laser scanners, enabling real-time scan control. Structured the cross-platform application using MVVM patterns and integrated internal SDKs for hardware communication. Implemented robust Bluetooth/Wi-Fi communication

and background services, applying best practices for permissions, lifecycle management, and multithreading to deliver reliable and responsive performance.

Skills: Performance Optimization, Bluetooth/Wi-Fi connectivity, Background Services, Permissions Management, Lifecycle & Multithreading, Android SDK, GPS

- Trimble Mobile Modus** (Cross Platform Open Source Project)
Spearheaded the creation of standardized mobile components in .NET MAUI, enforcing a consistent design pattern across Trimble apps. Applied modern architectural patterns including MVVM and Dependency Injection, significantly improving developer productivity and UI/UX consistency.
Skills: Android Framework, Theming & Styling, MVVM, Dependency Injection, UI/UX Principles
- R&D / Proof of Concept**
Developed a C++ library interfacing with **Android NDK** and GPS components for Assisted GNSS positioning. Work demonstrated at an AT&T conference in 2025.
Skills: LPP Protocol, Data Structures and Algorithms, Networking, Server-Client Communication, SUPL
- Trimble Precision IQ Tablet App** (Play Store)
Maintained and enhanced a precision agriculture app serving 50k+ users. Refactored parts of the app to an MVVM architecture with RxJava, delivered localization features, and resolved critical defects to ensure high app stability for field operations.
Skills: Java, RxJava, MVVM, Android Testing, Localization, Bug Fixes
- Trimble Mobile Manager** (Play Store)
Integrated a native C++ library for precise positioning. Implemented a dedicated Android service to listen to GNSS data for mock location functionality, managing foreground services and permissions according to the latest Android guidelines.
Skills: C++ Native Library, Android SDK, GNSS Integration, Foreground Services, Permissions Management

TECHNICAL SKILLS

- Languages:** Kotlin (Primary), Java (Intermediate), Python, C++, C#
- Android Development (3+ Years):** Jetpack Compose, Android SDK, Material Design, MVVM/MVI, Clean Architecture, Coroutines, Flow, LiveData, ViewModel, Navigation Component, Dependency Injection (Hilt/Dagger), Retrofit/OkHttp, Room, WorkManager, DataStore, Background Services, Bluetooth/Wi-Fi, NDK & GNSS
- Testing & Quality:** JUnit, Espresso, Mockito, MockK, UI Automation, Test-Driven Development (TDD), Code Reviews, Performance Optimization
- AI-Assisted Development :** GitHub Copilot, Cursor AI, Gemini, Firebase Studio
- CI/CD & Tools:** Git, GitHub, GitHub Actions, Bamboo, AWS (EC2), Agile/Scrum, Jira, Figma, Design System Implementation
- Additional Skills:** Cross-Platform (.NET MAUI, Xamarin), Backend (REST APIs, ASP.NET Core, Docker, Microservices), Databases (PostgreSQL, MySQL, MongoDB, Redis),

CERTIFICATIONS

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|---|------|
| • Microsoft Cloud Computing Essentials with Azure Management — Coursera | 2025 |
| • IBM AI Developer Professional Certificate — Coursera | 2024 |
| • Python for Data Science — NPTEL, IIT Madras | 2021 |
| • Google Cloud Platform — Qwiklabs Certified | 2021 |

LANGUAGES

English (Professional) | Malayalam (Native) | Hindi (Professional)