

# Karan Sharma

## Staff Software Engineer

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### SUMMARY

Staff Software Engineer with 10+ years building secure, large-scale mobile products at Commonwealth Bank, Block (Cash App), and Afterpay. Currently building CommBiz mobile at CBA from the ground up, owning architecture, engineering standards, and AI strategy for the Android org (internal MCP tooling, agents, and agentic workflows). Open-source maintainer of KRAIL (Compose Multiplatform) and a speaker at developer conferences.

### SKILLS

**AI:** harness engineering, context engineering, MCP servers

**APIs:** GraphQL, Protobuf, REST

**Security:** cryptography, session management, data privacy

**Accessibility:** WCAG 2.1 and 2.2

**Web:** TypeScript, Node.js

**Mobile:** Kotlin Multiplatform, Jetpack Compose, Android SDK

**Build / CI:** Gradle, GitHub Actions CI/CD

**Architecture:** Clean Architecture, MVP, MVVM, server-driven UI

**Quality:** Git, unit and snapshot testing, Coroutines

### OPEN SOURCE

**KRAIL** Compose Multiplatform trip-planning app

[github.com/ksharma-xyz/KRAIL](https://github.com/ksharma-xyz/KRAIL)

- Sydney public-transport app for iOS and Android, built solo in Kotlin Multiplatform. Live on both stores. Presented at Google I/O Extended Brisbane 2025.

### EXPERIENCE

**Commonwealth Bank** Staff Software Engineer

Sydney · 2024 to now

- Built the CommBiz mobile app from scratch. Defined the architecture, tech stack, and engineering standards for CBA's flagship business-banking app on Android.
- Lead AI strategy and readiness across the Android org. Built internal MCP servers, agents, and skills (including a design-system MCP) that automate Figma-to-code, UI generation, repetitive dev work, and end-to-end testing.
- Designed and built foundational mobile infrastructure used across squads: session management, dependency injection, core networking, encrypted storage, performance monitoring, analytics, and end-to-end testing frameworks.
- Developed core business-banking features end-to-end, including account management and secure multi-step authorization for high-value payments with push-notification authentication.
- Lead technical direction across architecture, code review, and engineering practices. Wrote a Jetpack Compose linting system enforcing architectural and design-system standards across teams. Train engineers across the org on AI-assisted development.

**Block (Cash App)** Senior Software Engineer

Sydney · 2022 to 2024

- Built and shipped the Cross-Border Payments feature for international markets, using server-driven UI with Kotlin, Jetpack Compose, and Coroutines.
- Contributed to the design-systems team, building the new design system and growing Jetpack Compose adoption across the Cash App Android codebase.
- Built accessible, WCAG-compliant UI components and led accessibility initiatives. Wrote tooling, documentation, and a Storybook app to help other teams build and test efficiently.

**Afterpay** Senior Software Engineer

Sydney · 2021 to 2022

- Built registration, login, KYC, and peer-to-peer payments in a fast-paced product environment.
- Built an accessible design system based on Material Design, and reusable complex Compose UI including parallax effects, calendars, and overflow layouts.

**Telstra** Senior Android Developer

Sydney · 2020 to 2021

- Rebuilt the Payments tab using Kotlin Flows, Coroutines, and the latest Jetpack libraries, and improved its load performance.
- Reduced tech debt by leading migrations off deprecated libraries. Built a design system with the UX team and mentored engineers across the team.

**Zip** Android Developer

Sydney · 2019 to 2020

- Built the in-store payments feature using Kotlin and RxJava, and complex wallet-card animations with the Anko declarative framework.

**Qualcomm** Software Engineer

Bangalore · 2018 to 2019

- Developed and tested OTA upgrades for Qualcomm chipset devices (msm8909, msm8916, sdm660, msm8998). Supported OEMs (Razer, Square, Reliance) launching new Android devices.

**Portea Medical** Android Developer

Bangalore · 2015 to 2017

- Built the app from scratch: social login with multiple-account linking, a patient booking and medicine-ordering flow, and an Android library for real-time clinician location tracking with device activity monitoring.

## EDUCATION

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B.E. Computer Science and Engineering, Punjab Technical University, India (2010 to 2014) · CGPA 7.86