



Kaleb Kircher

Staff+ Engineer

Experienced mobile applications and backend software engineer with over 14 years of specializing in Android, iOS, and Spring Boot with Heztner/AWS/Azure/OCI. Proven track record of delivering impactful applications across agriculture, aerospace, telematics, and motorsports, with over 10,000,000 downloads and 10,000 years of runtime on applications I've built or contributed to. Currently operating fleets of agentic agents through the SDLC.

Contact

Phone

575-770-1489

Email

kaleb.kircher@gmail.com

Location

Seattle, Washington

Technical Skills

Programming Languages

- Kotlin, Java, C++, JNI, KMP

Mobile Development

- Android, Jetpack Compose, iOS

Backend & Databases

- Spring Boot, RESTful APIs, GraphQL, RPC, SQLite, Spatialite, Postgres, Hibernate, Room, DynamoDB, Redis, MQTT, S3, Minio

Cloud/DevOps

- AWS (EC2, Lambda, Flink, Glue, SageMaker, SQS), Firebase (Auth, Crashlytics, Realtime, Analytics)

Frameworks/Architectures

- Clean Architecture, MVVM, MVI, Modular Monolith, Service and Microservice

Tools

- Git, Fastlane, CircleCI, Fastlane, Gradle, Maven

Education

Computer Science (BS)

Regis University, Summa Cum Laude

IT Administration (BS)

Regis University, Summa Cum Laude

Key Achievements

- Lead agentic coding migrations and tooling creation/usage with Codex and Claude Code to fleet and pipeline implementations
- Crash Reduction: Increased mobile crash-free rates from 52% to over 99%.
- App Optimization: Rewrote OpenGL-based render engines improving performance by 200x, 100x gains for data persistence redesigns, 50x synchronization performance by implement batch API's, 20x mobile data reductions by implementing eventing mechanisms
- Modernization: Migrated legacy systems to Kotlin/Jetpack Compose, adopting Clean Architecture and MVVM frameworks.
- Scalable Design: Designed an ETL pipeline leveraging AWS (SQS, Glue, Flink, SageMaker, Quicksight) to process diagnostic data for 300,000+ daily users.
- Autonomous Systems: Delivered path-optimized autonomous steering for agricultural equipment using RESTful APIs, Kotlin, and Spatialite.

Professional Experience

May 2025 - Present

Oracle | Washington State

Principal Engineer Team Lead

- Pioneered many of the agentic workflows used by the technical teams including agent and sub-agent team structures, commonly used skills and code map documentation
- Introduced agentic workflows to essentially eliminating backlog grooming, technical breakdowns and pointing sessions hundreds of hours a month in meetings and busy work
- Agentic automation of our bug fix and CI/CD automation test pipeline
- Lead Android application development for first responder in-vehicle Computer Aided Dispatching
- Migrated applications to modern Kotlin build scripts, KSP and K2
- Refactored non-compliant OAuth2 IDM SDK to modern Kotlin KMP and updated to security requirements
- Refactored client WebSocket implementation across multiple applications for reliability and background compliance
- Refactored metrics SDK to offline-first architecture

Find Me

kalebkircher.com
linkedin.com/in/kalebkircher
github.com/KalebKE

2021 - 2025

PTx Trimble | Washington State

Staff+ Engineer

- Lead Android application development for autonomous steering and control systems in agriculture
- Refactored large Java-based applications to Kotlin-based modular architectures.
- Converted XML-based navigation to Jetpack Navigation and Compose.
- Designed hybrid push/pull data synchronization with Room, RESTful APIs, and MQTT.
- Developed novel binary file-based time-series databases for high-scale event logging.

2017 - 2021

Trimble Navigation | Westminster, CO

Staff Engineer

- Modernized hundreds of Android Activity-based views to MVVM-based architecture.
- Improved rendering engine performance by refactoring to VBOs.
- Increased app reliability, taking crash-free rates from 50% to over 99%.

2016 - 2017

Vorto.ai | Denver, CO

Principal Mobile Engineer

- Designed IoT-based breadcrumb tracking for off-road vehicles.
- Automated billing and work order processing systems for supply chain efficiency.
- Built CI/CD pipelines with FastLane and GitFlow for app store integration.

2015 - 2016

Shotover Systems | Boulder, CO

Mobile Lead Engineer

- Developed Android/iOS apps for real-time augmented reality mapping and aerospace camera systems.
- Integrated low-latency H264 video streaming using MQTT and codec APIs.

2011- Present

Tracqi Technology

Founder

- Built motorsports apps (e.g., OBD diagnostic tools, lap timers) for Android/iOS with 10,000+ downloads.
- Leveraged Bluetooth/WiFi for vehicle diagnostics and performance measurement.
- Utilized AWS (EC2, S3, Lambda) for app infrastructure.