Pushkar Agnihotri

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EDUCATION

California State University, Fullerton, USA   **Aug 2024 - May 2026**
Master of Science, Computer Science (Software Engineering Minor)

TECHNICAL SKILLS

Languages: Kotlin, Java, JavaScript, Python, SQL
Frameworks: Jetpack Compose, Kotlin Multiplatform, React Native, React.js, Node.js, Next.js, Express.js, Spring Boot
Databases: MySQL, PostgreSQL, MongoDB, Room DB, Realm DB, Vector DB
Cloud & DevOps: AWS, Azure, Google Cloud, Firebase
Other Skills: Git, MVVM, REST APIs, GraphQL, Dependency Injection, JSON, SOLID Principles, Scrum, Agile

PROJECTS

AI-Powered Yoga Studio Web App (LangChain, RAG, OpenAI) Website   **Jun 2025 - Jul 2025**
- Built and deployed a full-stack AI-driven web platform featuring a Retrieval-Augmented Generation (**RAG**) chatbot for personalized yoga recommendations using **OpenAI GPT**, **Pinecone**, and **ChromaDB**.
- Designed scalable backend architecture with **Node.js** microservices, **WebSockets**, enabling real-time chat, semantic search, and automated knowledge management.

Full Stack KMP APP with Spring Boot Backend   **Sep 2025 - Oct 2025**
- Developed a cross-platform Kotlin Multiplatform (**KMP**) app with a shared **Ktor** HTTP client and **Spring Boot** backend, reducing code duplication and improving development efficiency.
- Implemented high-concurrency RESTful APIs with Kotlin Coroutines, Spring Data R2DBC, and **PostgreSQL**, securing endpoints via JWT authentication and achieving low-latency communication.

F1 Companion React Native App   **Nov 2025 - Jan 2026**
- Designed and developed "F1 Companion," a cross-platform mobile application assisting international students with critical visa compliance, secure digital wallet functionality for sensitive documents, and pre-arrival planning tools.
- Architected a scalable TypeScript codebase using **React Native (Expo)** and **Zustand** for persisted state management, implementing a privacy-first architecture with local encryption and a polished Material Design 3 UI.

WORK EXPERIENCE

Carnot Technologies Private Limited, India | Senior Software Engineer (Android)   **Jan 2021 - July 2024**
- Led adoption of **Model-View-ViewModel** architecture across 3 Native Android apps, enabling faster feature rollout, reducing production bugs by 25%, and simplifying onboarding for new developers.
- Designed and deployed an **in-house SDK** featuring gamification elements, driving a 20% increase in in-app purchases and a 15% boost in customer retention through repeat recharges.
- Redesigned the app into a **multi-module project**, optimizing code structure, enhancing maintainability, and enabling faster, independent development and testing.
- Enhanced user experience and application resilience by implementing **offline-first** functionality. Also, refined data models for efficient local storage and synchronized data with a backend server using **WorkManager**, ensuring seamless operation even in low-connectivity environments.
- Integrated **Firebase, CleverTap, UXCam,** and other customer engagement and performance platforms to monitor user behavior, analyze segmentation, and deliver personalized user experiences, enhancing user satisfaction.
- Contributed to the app's overall success, helping it surpass **1 million downloads** on Google Play through architectural improvements and feature scalability.

Software Engineer (Android)
- Proposed and led the **Integration of a third-party app** into our core product, expanding feature offerings under one roof and driving a 40% increase in user base.
- Used **Baseline Profiles** to shift performance-sensitive code from **Just-In-Time** (JIT) to **Ahead-Of-Time** (AOT) compilation, reducing app startup time by 27% and enhancing user experience.
- Implemented **Gradle Version Catalogs** to simplify and standardize dependency management across all projects, centralizing libraries for 20+ modules, ensuring consistent versioning, and enhancing scalability.
- Migrated legacy Android apps from **Java** to **Kotlin** and replaced **RxJava/RxAndroid** with **LiveData** and **Coroutines**, resulting in more concise, maintainable, and idiomatic Kotlin code.

ACCOMPLISHMENTS
- Winners of **Smart India Hackathon 2019.**
- Awarded the title of **Runner Up** by Microsoft at MS Hack 2.0.

MENTORSHIP & LEADERSHIP
- Mentored junior Android engineers at Carnot Technologies on MVVM, Kotlin Coroutines, and app architecture.
- Published Medium articles on AI-powered app design and cross-platform Kotlin; collectively reached 300+ readers.

CERTIFICATES
- Google Cloud Computing Foundations Certificate
- AWS Knowledge: Serverless Computing