## Manish Kumar

### Education

### Guru Nanak Institute Of Technology

August 2022

Bachelor of Technology in Computer Science and Engineering (GPA: 7.68/10)

Ambala, Haryana

### Technical Skills

Programming Languages: Go, Dart, Java, Swift, Kotlin, C++, Python, JavaScript, SQL

Backend Development: Go (Golang), RESTful APIs, Microservices, gRPC, Docker, Kubernetes

Mobile Development: Flutter, Android Native, iOS Native, UI/UX Design, Cross-Platform Development

Frameworks & Libraries: Gin, Gorilla Mux, GORM, Bloc, Provider, Cubit, GetX, ArcGIS, Firebase, OpenID Architecture & Methodologies: Clean Architecture, SOLID Principles, Object-Oriented Programming, Agile Development, State Management, Microservice Architecture, HLD/LLD Design

Tools & Infrastructure: Git, CI/CD, Docker, Kubernetes, PostgreSQL, MongoDB, Redis, MobSF, SonarQube, OSV Scanner, Firebase Analytics, Crashlytics, RESTful API Integration

**Specializations:** Backend Systems, API Development, Database Design, System Architecture Documentation, Test Case Development, GIS Integration, Bluetooth LE, Real-time Data Processing, Authentication Systems

## Experience

#### WITS Innovation Lab

Aug 2024 - Sept 2025

Senior Software Engineer (Go / Flutter)

Chandigarh

- Led 10 Flutter developers, ensuring seamless delivery of scalable, production-ready applications.
- Architected and maintained 8+ Go microservices for Email, SMS, Payment, Digital Signature, and Real-time Event Processing.
- Integrated Temporal for orchestration and implemented observability with Prometheus and Grafana.
- Developed and optimized RESTful and gRPC APIs using Go and Gin for low-latency communication.
- Built CI/CD pipelines and automation scripts with Make, Docker, and GitHub Actions.
- Delivered robust features and bug fixes in a Clean Architecture using Bloc, Provider, and Cubit.

#### RegalarTech Pvt. Ltd.

 $Jan\ 2023-Jun\ 2024$ 

Mobile App Developer (iOS/Android)

Pune, Maharashtra

- Developed, managed and deployed 2 stand-alone mobile apps, implementing features like GIS Map integration, Live cameras, Playback, Audio and more.
- Implemented authentication using Keycloak and OpenID client.
- Performed security testing using tools like MobSF, SonarQube, and OSV Scanner.
- Handled app development, testing, debugging, and deployment for 4+ different products.
- Integrated iOS and Android native code with Flutter to enable seamless communication, implemented native UI components and platform-specific functionalities, and incorporated GIS features using the ArcGIS framework, including map rendering, spatial analysis, and geolocation services.

#### Xelpmoc Design and Tech Limited

Jan 2022 - Dec 2022

Flutter Developer

Bangalore

- Designed declarative UI, performed bug fixes, and handled maintenance for mobile applications.
- Managed iOS and Android app deployment and maintenance.
- Implemented push notifications, background fetch, streams, and state management.
- Contributed to the development of mobile apps, including one available on the Google Play Store.

## NPS 2.0 (Protean eGov Technologies) — Go, Docker, Kubernetes, PostgreSQL, Redis Jan 2025 – Present

Backend Developer

- Architected and maintained 10+ microservices for NPS 2.0 (National Pension System) platform using Go with Clean Architecture principles.
- Developed comprehensive High-Level Design (HLD), Low-Level Design (LLD), and Business Requirements Documents (BRD) for all microservices.
- Implemented pension management services including subscriber onboarding, contribution processing, and withdrawal management using Gin framework and gRPC.
- Designed event-driven architecture with message queues for asynchronous processing of pension transactions and regulatory compliance.
- Built comprehensive test suites including unit tests, integration tests, and end-to-end test cases achieving 90+ code coverage.
- Deployed services using Docker containers and Kubernetes with auto-scaling capabilities, handling government-scale traffic loads.
- Implemented monitoring and alerting using Prometheus and Grafana, ensuring 99.9+ uptime for critical pension operations.

# Blast Golf 2.0 — Flutter, Dart, Bluetooth LE, Firebase, AI Integration Jan 2025 – Present Lead Mobile Developer

- Implemented Clean Architecture principles, utilizing state management solutions like Bloc.
- Collaborated on the development of Blast Golf 2.0, an AI-powered swing analysis platform designed to enhance player development and coaching experiences.
- Integrated Bluetooth Low Energy (BLE) communication, enabling seamless data transmission between the mobile app and the Blast Swing & Stroke Analyzer sensor.
- Implemented AI-driven features using Blast iQ<sup>™</sup>, providing personalized coaching insights by analyzing user swings against a database of over 325 million swings.
- Developed real-time feedback mechanisms, including adaptive audio cues through Blast BioSense<sup>™</sup>, to assist
  users in improving posture and swing timing.
- Contributed to the design of interactive UI components, enhancing user engagement with features like weekly progress reports, challenges, and leaderboards.
- Ensured cross-platform compatibility, delivering consistent performance and user experience across both Android and iOS platforms.

# GeoShield Mobile — Flutter, Dart, ArcGIS, Firebase, Keycloak Standalone Developer Jan 2023 – Jun 2024

- Led the full-cycle development of GeoShield Mobile, a CJIS-compliant, real-time situational awareness application designed for law enforcement agencies.
- Integrated live surveillance camera feeds, enabling officers to access real-time video streams directly within the mobile application, enhancing field situational awareness.
- Implemented two-way audio communication, allowing seamless interaction between field officers and command centers, facilitating coordinated responses during incidents.
- Developed real-time data visualization features, including Active Calls for Service (CFS), GPS-enabled vehicle tracking (AVL), and License Plate Reader (LPR) alerts, providing comprehensive operational insights.
- Ensured secure authentication mechanisms by integrating Keycloak and OpenID Connect, maintaining robust user identity management and data protection.
- Conducted thorough security assessments using tools like MobSF, SonarQube, and OSV Scanner to identify and mitigate potential vulnerabilities.
- Managed cross-platform deployment for Android and iOS, ensuring consistent performance and user experience across devices.
- Integrated Firebase Analytics and Crashlytics, enabling real-time monitoring of user engagement and application stability.