

Harekrishna Bagh

Sambalpur, Odisha, India

📞 6370251494 | ✉ harekrishna@bagh.co.in | 🌐 bagh.co.in
🐙 github.com/hkbagh | 🔗 linkedin.com/in/harekrishna-bagh-538672292

Summary

Software Engineer specializing in **Android/Mobile Engineering** and **Cloud-Native DevOps**. Proven track record designing high-performance mobile apps in **Kotlin**, **Flutter**, and **React**, alongside backend microservices using **Node.js** and **FastAPI**. Experienced in automating delivery with **Docker**, **Kubernetes**, and **GitHub Actions CI/CD pipelines** for applications serving over **55,000 active users**.

Experience

Nduat Masti Pvt. Ltd.

Dec 2025 – June 2026

Full-Stack Mobile & DevOps Engineer

Remote

- Engineered a low-latency, real-time voice calling engine utilizing **WebRTC (P2P mesh)** with customized **STUN/TURN** (coturn) traversal and WebSocket signaling to guarantee call setup under 200 ms.
- Architected a scalable, event-driven **serverless backend** leveraging Firebase Cloud Functions, Node.js microservices, and Redis Pub/Sub, supporting **55,000+ active users** at near-zero idle compute cost.
- Spearheaded end-to-end Android release management on **Google Play Console**, maintaining staged rollouts, internal track distribution, and monitoring Android Vitals (99.4% crash-free rate).
- Built robust automated testing suites using **JUnit**, **MockK**, and **Espresso UI tests**, executing within a GitHub Actions CI/CD pipeline for automated linting, test coverage, and signed AAB generation.

MCL Bharatpur Area — Mahanadi Coalfields Ltd.

May 2025 – June 2025

Systems & Network Infrastructure Intern

Talcher, Odisha, India

- Audited enterprise network infrastructure and implemented firewall rules across industrial subnet segments to ensure operational continuity.
- Automated server log auditing and vulnerability scans using custom **Bash** and **Python** scripts, reducing manual system check times by 40%.

Projects

ISRO Launches — Mobile Telemetry Tracker | Kotlin, Flutter, Fastlane, Play Store

2024 – 2026

- Built and published a production **Android** application using **Kotlin**, MVVM architecture, Coroutines, and Jetpack Room for persistent local caching during offline states.
- Developed a cross-platform companion interface in **Flutter**, reusing business logic across platforms while reducing UI maintenance overhead.
- Configured a **Fastlane** and GitHub Actions automated pipeline to build signed AAB release bundles, run linting checks, and deploy to internal Play Store tracks.

Distributed AI Surveillance Pipeline | Docker, Kubernetes, FastAPI, Node.js, React

SIH 2025

- Architected a scalable edge-to-cloud computer vision pipeline using **Docker** and **Kubernetes (K8s)** to handle simultaneous multi-camera video ingestion.
- Constructed an administrative incident monitoring console using **React** backed by a **Node.js** API gateway for real-time alert dispatching and triage.
- Containerized ML inference workers with NVIDIA Container Toolkit, optimizing pod resource requests to sustain 30+ FPS ingestion rates.

CloudOps Automation & Observability Engine | Terraform, AWS, GitHub Actions, Prometheus

2026

- Provisioned reproducible cloud infrastructure on **AWS (EC2, VPC, S3, IAM)** using **Terraform (IaC)**, enforcing least-privilege security policies.
- Built continuous delivery workflows that run automated unit/integration tests, build multi-arch container images, and push versioned tags to Amazon ECR.
- Implemented distributed tracing and metrics aggregation via Prometheus and Grafana dashboards for cluster-wide CPU/memory tracking.

Technical Skills

DevOps & Cloud Infrastructure : Docker, Kubernetes (K8s), CI/CD (GitHub Actions, Fastlane), Terraform (IaC), AWS (EC2, S3, ECS, Lambda), Prometheus, Grafana, Linux/Bash Scripting, Nginx

Mobile Development : Android SDK, Kotlin, Jetpack (Compose, Room, ViewModel), Flutter, Dart, Fastlane Deployment, Google Play Console, Retrofit, Coroutines, Espresso, JUnit, MockK

Web & Backend Engineering : React, Node.js, Express, FastAPI, Python, WebRTC, WebSockets, STUN/TURN, Serverless (Cloud Functions), RESTful APIs, Redis, PostgreSQL, MongoDB

Core Concepts & Tooling : Git, Microservices, System Architecture, Reverse Engineering, OWASP Top 10, Network Security, Automated Testing

Education

Sambalpur University Institute of Information Technology (SUIIT)

Odisha, India

B.Tech in Computer Science Engineering

2023 – 2027

- Relevant Coursework: Data Structures & Algorithms, Operating Systems, Computer Networks, Database Management Systems, Cloud Computing, Distributed Systems.