

# Bhaumik Singh

FULL-STACK SOFTWARE ENGINEER | WEB, ANDROID & CLOUD EXPERT

[github.com/mic-360](https://github.com/mic-360) | [linkedin.com/in/bhaumic](https://linkedin.com/in/bhaumic)

## Education

### Institute of Technical Education & Research, SOA University – Bhubaneswar, Odisha

2021 – 2025

B.Tech in Computer Science and Engineering

- CGPA: 7.3/10
- Relevant Courses: Data Structures, Operating Systems, Database Systems, Algorithms, Distributed Systems, Machine Learning

## Experience

### Karkhana, Gurugram

Jan 2025 – Present

SDE I

Full-time

- Built and launched a production-grade makerspace booking platform (Karkhana Hub) using Next.js 16, tRPC, and MongoDB. Enabled end-to-end machine rentals and workshop workflows for **2K+ users**.
- Eliminated frontend-backend contract mismatches and reduced integration bugs by architecting a strict type-safe service layer using TypeScript and tRPC within a monorepo.
- Engineered a fault-tolerant payment pipeline using Razorpay and unchanging state transitions, preventing duplicate bookings and ensuring **100%** reconciliation accuracy.
- Optimized performance by implementing Redis caching strategies, reducing data-fetch latency for high-read queries by **53%**.
- Established a Dockerized CI/CD pipeline on AWS (EC2, Lambda) with Prometheus monitoring, ensuring high availability and proactive detection of production issues.

## Skills

<b>Languages</b>	Java, Python, C++, Go, TypeScript, JavaScript, Kotlin, Dart, Bash
<b>Fremworks</b>	Next.js, Flask, Django, Express.js, Spring Boot, AsP.Net, Flutter, Jetpack Compose, React Native(Expo)
<b>Tools &amp; Database</b>	ARCORE, Gradle, Firebase, PostgreSQL, MongoDB, Git
<b>Cloud</b>	AWS(EC2, S3, Lambda, CloudFront), GKE, Vertex, Docker, Kubernetes, Terraform, Jenkins, Github Actions
<b>Observability</b>	Custom Renderers, FFmpeg, SQL/NoSQL Queries, Prometheus, ELK Stack, Performance Profiling

## Projects

### Makerapp

Website

Multi-Tenant Machine Booking Platform

- Architected and delivered a full-stack, multi-tenant booking platform using **Next.js 16, TypeScript, tRPC, Prisma, and MongoDB**, enabling machine rentals, lab onboarding, and workshop scheduling across Admin, Vendor, and User roles.
- Engineered a transactional booking and payment pipeline with **Razorpay**, implementing idempotent state transitions, role-based OAuth authorization (Google/LinkedIn), optimized indexing, and **Redis** caching for low-latency dashboard queries.
- Designed a modular monorepo architecture with **Turborepo** and deployed containerized services on **AWS (EC2, S3, Lambda, VPC)** via CI/CD pipelines, integrating **Prometheus** monitoring for production reliability and observability.

### Spotify Looper

Github

Precision A–B Playback Controller

- Architected a cross-platform Spotify playback controller using **Flutter + Riverpod**, implementing millisecond-accurate A–B looping and secure **OAuth 2.0** Web API integration with automated token lifecycle management for >99% session reliability.
- Engineered a low-latency loop execution pipeline using **just\_audio**, optimizing seek operations to achieve sub-120ms glitch-free transitions while maintaining responsive Material 3 UI across Android and Web (PWA).

## Certifications

Aug 2024	<b>Cybersecurity Professional Specialization,</b>	Google
Jun 2024	<b>Automate Cybersecurity Tasks with Python,</b>	Google
Mar 2024	<b>Tools of the Trade: Linux and SQL,</b>	Google
Jan 2024	<b>Connect and Protect: Networks and Network Security,</b>	Google
Jan 2024	<b>Google Analytics Certificate,</b>	ULS Association
Mar 2023	<b>Frontend Certification Exam,</b>	Codedamn
Sep 2022	<b>Android Mobile Application Development,</b>	Meta
Sep 2022	<b>Architecting Google Compute Engine Specialization,</b>	Google
Sep 2022	<b>Elastic Google Cloud Infrastructure: Scaling and Automation,</b>	Coursera
Sep 2022	<b>Reliable Google Cloud Infrastructure: Design and Process,</b>	Coursera
Sep 2022	<b>Essential Google Cloud Infrastructure: Core Services,</b>	Coursera
Mar 2022	<b>GitHub Actions: CI/CD,</b>	Codedamn