

Sagnik Biswas

Website: sagnik.dev | LinkedIn: [sbiswas2209](https://www.linkedin.com/in/sbiswas2209) | GitHub: [sbiswas2209](https://github.com/sbiswas2209)

Email : biswas.sagnik.sep22@gmail.com

Mobile : +91-6289202677

EDUCATION

SRM Institute of Science and Technology, Kattankulathur

Bachelor's of Technology in Computer Science and Engineering

Tamil Nadu, India

July 2019 – July 2023

BIO

Full-stack mobile developer with 3+ years of experience building scalable apps at startups including Farmako Healthcare (YC S20) and SpeakX.ai. Expertise in Flutter, Go, native Android/iOS development, and cloud services (Google Cloud, AWS). Delivered features that boosted user engagement by 38% and scaled applications to 150K+ downloads.

EXPERIENCE

SDE-2

SpeakX.ai | Homepage | Software

Gurugram, India

October 2025 – Present

- **Served** as individual contributor on multiple projects, **collaborating** closely with product managers, designers, and key stakeholders to **deliver high-impact features** and **meet project timelines**.
- **Implemented** enhanced progress sections with user journey visualizations, dynamic progress graphs, and a performance-based confidence score algorithm, **improving user engagement and retention metrics by 38%**. Developed server-driven UI tailored to individual user needs. Enabled communication via gRPC, with MongoDB as the database and Redis as cache.
- **Designed** and **executed** A/B tests to optimize user metadata collection, **resulting in** more personalized user experience through data-driven insights and segmentation.
- **Enhanced** iOS deployment by developing native plugins for seamless integration with internal systems and establishing automated release pipelines, **accelerating delivery cycles** and **improving app stability**.
- **Created** multiple **server-driven user engagement boosters** for the app using **Go**, **increasing daily active users by 20%**.

Software Engineer (Contractual)

Emendo AI | Homepage | Software

Remote

September 2025 – October 2025

- Integrated Google and Apple Sign-In authentication using AWS Cognito, decreasing user onboarding friction by 30% and enhancing security and scalability.
- Led a team of 3 developers; managed task assignment, prioritized backlogs, and ensured successful sprint delivery in a fast-paced environment.
- Implemented Google Analytics across multiple platforms to monitor user behavior, track conversion metrics, and inform product optimization strategy.

Software Engineer

Farmako Healthcare (YC-S20) | Homepage | HealthTech

Gurugram, India

July 2023 – September 2024

- Built **native plugins** in **Kotlin and Swift**, boosting app performance from 30% to 70%, scaling from 15K+ to 150K+ downloads and generating 7L INR monthly sales.
- Revamped UI/UX with Flutter and Dart, improving app ratings from 3.0 to 4.1 stars on Playstore and App Store.
- Implemented robust state management solutions using **BLoC** and **GetX** framework to ensure efficient data handling and UI updates.
- Managed app deployment to **App Store and Google Play** using **fastlane**, ensuring compliance with platform guidelines and versioning best practices.
- Implemented **event-driven architecture** with **Firebase and Google Pub/Sub** for real-time updates.
- Created internal **design system framework**, improving developer productivity by 87%.
- Integrated **Google ODRD**, reducing delivery errors by 30%.
- Developed custom **Flutter plugin** for caching using **RoomDB** and **GRDB**.
- Built and deployed revenue-generating APIs using Go, MongoDB, and PostgreSQL for the Government ABDM (ABHA) infrastructure, and maintained CI/CD pipelines with **Docker** and **AWS EC2** using **Git for version control**.
- Contributed to internal packages in **Dart, Kotlin, Java, Swift, Objective-C**, collaborating across design, development, and maintenance.
- **Conducted training sessions** for ground staff and cross-functional teams on internal tools.

Flutter Developer (Contractual)

Farmako Healthcare (YC-S20) | Homepage | HealthTech

Gurugram, India

Apr 2022 – Jun 2023

- Developed main user-facing app in **Flutter** from scratch, scaling to **15K+ downloads**.
- Built chat system enabling user-pharmacist communication via **RESTful APIs using JSON** for data transfer and **push notifications**.
- Designed **user analytics dashboard** on **Tableau** to drive product and operational decisions.
- Implemented performance monitoring with **Grafana, Loki, and Prometheus**.
- Engineered warehouse management software, reducing shipping time from 25 to 5 minutes with **IoT (Raspberry Pi)** automation.

- Developed internal apps to track shipments in real-time using **Java (Android)** and **Retrofit REST APIs**.

Software Engineer Intern

Unique Identification Authority of India | [Homepage](#) | Government of India

Bangalore, India; Remote

Jun 2022 – Nov 2022

- Collaborated with cross-functional teams in an **Agile** environment to design and deliver a standalone service, presenting periodic reports and technical insights to senior management.
- Refactored address verification workflow for change requests using **Spring Boot (Java)**, integrating **MapMyIndia** and **OpenStreetMap** data.
- Pioneered an address verification system utilizing Go (Fiber), leading to a 90% data standardization rate and fixing top three causes of duplicate entries, based on internal audit.

MENTORSHIP

Mentor

Edu-Versity | [Homepage](#) | Mentorship

Online

Jan 2024 – Present

- Mentored and guided **200+ students** in Full Stack Web Development covering **HTML, CSS, JavaScript, ReactJS, NodeJS, and MongoDB**.
- Led structured training sessions, conducted doubt clearance, and provided project guidance.

PROJECTS

Farmako App | Flutter, Swift, Kotlin | [App Link](#)

- Scaled the app to **150K+ downloads**, driving monthly sales of 7L+ INR through continuous optimization and feature delivery.
- Improved performance by 2.3x by developing **native plugins** in Swift and Kotlin, along with efficient caching via RoomDB/GRDB.
- Revamped the app's design with **Material Design 3**, increasing the average store rating from 3.0 to **4.1 stars**.
- Implemented real-time updates and notifications with **Firebase Cloud Messaging + Google Pub/Sub**, enhancing user engagement.
- Setup CI/CD pipeline for app releases on Playstore and Appstore using **Github Actions, Fastlane** and **Shorebird**

Drug Recommendation System | ReactJS, FastAPI, Neo4J, Material UI | [GitHub](#)

- Built a drug discovery system using **Neo4J graph database**, **FastAPI backend**, and **ReactJS UI** to identify therapeutically similar drugs with similarity scoring.
- Architected the application using the **MVVM pattern**, separating data, business logic, and UI layers for enhanced maintainability and testability.
- Implemented Jaccard index for similarity-based retrieval, ensuring rapid analysis of novel drug entries without training.

Producto | NodeJS, Flutter, MongoDB | [GitHub](#)

- Developed a cross-platform **Flutter** app with a **NodeJS backend** and **MongoDB database**, enabling note-taking with collaboration and sharing features.
- Optimized workflows with **real-time sync**, ensuring seamless multi-user productivity across platforms.

TECHNICAL SKILLS

Programming Languages: Dart, JavaScript, TypeScript, Python, Java

Frameworks & Libraries: Flutter, ReactJS, NestJS, NodeJS, FastAPI

Databases: MongoDB, Firebase, PostgreSQL, MySQL, Oracle SQL

DevOps / Cloud: CI/CD, Serverless, Microservices, API Design, System Design, Docker, AWS, Google Cloud, Firebase services (Crashlytics, Push Notifications, Analytics)

Other Skills: Alexa Skill Development, IoT Development, Jira, Agile, Rest APIs, GraphQL, gRPC

ACHIEVEMENTS

Aadhaar Hackathon (Organized by UIDAI)

First Prize

Theme: Hackathon

Nov 2021

PUBLICATIONS

Patent Recommendation Engine Using Graph Database

Springer Publications

Theme: Conference Paper

Sep 2022

VOLUNTEERING

SRMKZILLA (Official Mozilla Campus Club of SRMIST)

Chennai, India

Head of Technical

srmkzilla.net

- * Led the technical team of 20+ members, delivering multiple **open-source projects** in **web, mobile, and IoT domains**.
- * Organized and conducted 10+ technical workshops on **frontend web development (ReactJS, JavaScript)**, **mobile app development (Flutter)**, and **IoT prototyping (Arduino, Raspberry Pi)**.

Alexa Developers SRM

Chennai, India

Team Lead

alexadevsrm.org

- * Led and mentored a team of developers to build Alexa Skills and **voice-based applications**, engaging 500+ students across campus.
- * Managed technical workshops, open-source projects, and secured sponsorships, strengthening community partnerships.