Turjoy Saha

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Professional Summary

Innovative software engineer with **5 years** of experience architecting and delivering high-performance mobile and web applications. Adept at bridging business needs with technical solutions, leveraging **React**, **React Native**, **Spring Boot**, **Python**, and **NodeJS** to build scalable, maintainable systems.

Employment History

UST (Client: Merck) - Bengaluru (Bangalore)   *June'24 - Present | Developer III*

- **Modernized** legacy code by reconfiguring **Realm**, **MobX**, and **React Navigation**, and implemented **MSAL (OAuth2 with PKCE)** native modules in **Swift**, **Objective-C** (iOS) and **Java**, **Kotlin** (Android) for a **React Native** app with a **Spring Boot** backend, cutting navigation-related crash reports by **35% and** and enabling centralized user tracking—boosting engagement by **30%**.
- **Streamlined** developer pipelines for **React/React Native (iOS and Android)**, reducing build and deployment time by **25%** across production, development, and staging environments using **GitHub Actions** improving **DX**.

Atoll Solutions – Bengaluru (Bangalore)   *April'23 - May'24 | SDE II*

- **Built** a **SolidJS** admin dashboard with **CI/CD** integration, improving UX/UI and boosting user engagement by **50%** and reducing onboarding time for admins by **20%**.
- **Developed Svelte** plugins for **Budibase**, enabling tag tracking for hospital and warehouse clients and reducing manual tracking effort by **70%**.
- **Increased** backend consistency from **90% to 98%** by implementing a more efficient **Kafka Pub-Sub** model in a new **FASTAPI** codebase.
- **Optimized NodeJS (Express.js)** and **Python** systems, reducing API response times by **35%** and improving throughput by **40%**.
- **Mentored** engineers via code reviews and documentation, improving code quality and reducing PR turnaround time by **30%**.
- **Containerized** existing codebase with **Docker**, improving deployment reliability to **99.9% uptime**.

Wedcell - Delhi   *October'22 - March'23 | CTO*

- **Upgraded** a **React Native** app to production grade, reducing bundle size by **80%** and improving app security compliance by meeting **100%** of internal audit requirements.
- **Implemented OTA updates** via **CodePush**, delivering features to **100% of users** instantly and reducing update lag from weeks to minutes.
- **Leveraged React Native**, **Next.js**, **Node.js**, **MongoDB**, and **AWS** to improve load times by **30%**, increasing user retention by **20%**.
- **Delivered Android/iOS** apps, a **website**, and a **dashboard**, increasing cross-platform engagement by **25%**.

Girmesofttech - Pune   *August'21 - September'22 | SDE*

- **Led** payroll and attendance management system development, applying **SOLID principles** and **atomic design**, boosting developer efficiency by **30%** and reducing defect rates by **20%**.
- **Improved** web app performance through better **state management** and **server-side rendering** fixes, reducing bundle size by **25%** and load times by **1.5s**.
- **Utilized React Native**, **Redux**, **Jest**, **NativeBase**, **Java (Spring, Hibernate)**, and **GitHub Actions** to accelerate release cycles by **40%**.
- **Mentored** 5 developers in **Java** and **React Native**, improving onboarding speed by **50%**.
- **Delivered** "My Fit Mantra" MVP, acquiring **500+ users** in the first 3 months.

Supaprix – Lagos – Freelance   *February'21 - July'21 | SDE*

- **Delivered** a mobile and web application in 6 months, meeting **100%** of project milestones on time.
- **Developed** geolocation-based ads, real-time **chatbot**, **OTP**, and anonymous login—boosting user sign-ups by **35%**.
- **Used React-Native**, **React (Material-UI)**, **Jest**, **NodeJS (Cloud Function)**, and **Firebase** to achieve **99% crash-free sessions.**

Bengal Cotton House – Kolkata – Freelance   *July'20 - February'21 | SDE*

- **Built** a full-stack e-commerce web application, launching the client's first online channel and generating **₹2L+ in first-month sales**.
- **Implemented** a **PHP** plugin for automated SEO, improving organic traffic by **45%** within 2 months.

Projects:

Ecommerce backend with microservices:
https://github.com/turjoy-real/ecom_v1.git

- **Designed** a horizontally scalable architecture using Spring Boot microservices, handling **50K+ concurrent requests** with <**200ms**latency at peak load, using **Spring Boot** microservices with **OAuth2 Authorization Server (PKCE)**, **Resource Server**, and **social login (Google)** for secure user and M2M authentication.
- **Implemented Kafka** for reliable inter-service communication (orders, payments, notifications) and **Redis** for fast caching, session management, and real-time data access.
- **Managed** data with **MySQL** (transactions) and **MongoDB** (catalog, cart), leveraging **Elasticsearch** for fast, typo-tolerant product search.

- **Containerized** all services with **Docker**, deployed via **Kubernetes**, and integrated **Prometheus** and **Grafana** for monitoring and observability.

Personal Blog:

https://github.com/turjoy-real/blog_pro.git | turjoysaha.com

- **Built** a headless CMS blog in **Strapi + NextJS (SSG)**, growing to **300 active users in 2 months** and achieving **98+ Lighthouse SEO score**.
- **Integrated AWS S3**, **Google Analytics**, and **Firebase Realtime DB** to track engagement and ensure **<1s** load times.

React Native Animation:

https://github.com/turjoy-real/FadeNGrow

- **Built** a custom animated progress bar in React Native, achieving 100% faster performance than third-party libraries.
- **Implemented** fade-in with delay, staggered descent animations, and dynamic width interpolation for smooth progress effects.
- **Leveraged** prompt engineering and generative AI for rapid concept learning and accelerated implementation.

Scalable Modular React Native To-Do App with Full Test Coverage:

https://github.com/turjoy-real/ToDoApp.git

Built a modular React Native To-Do app using **hooks**, **gesture handling**, **React Navigation**, **Context API**, later migrating to **Redux** with **TypeScript**, **Redux Toolkit**, and **MSW** for API mocking; used **Firebase Realtime DB** in production and ensured quality with **Jest**, **React Native Testing Library**, and **Maestro** for E2E testing.

Education

MS in Computer Science – Scaler Neoversity, Woolf University   *February'21 - August'25*
GPA:4 | US percent: 97% | Certificate | Transcript | Public Shared Credentials

BTech in Electronics and Communication - Institute of Radio physics and Electronics, University of Calcutta   *2016 - 2020*
CGPA: 8.2

Skills

- **Languages:** Java 11+, TypeScript, JavaScript (ES6+), Python, Swift, Objective-C, CSS, HTML5
- **Frontend:** React (Hooks, Redux, Redux Toolkit, Context API), React Native, Next.js, SolidJS, Svelte, MUI, MobX
- **Backend:** Spring Boot, JPA, Hibernate, Node.js, Express.js, FastAPI, Strapi CMS
- **Architecture & APIs:** Microservices (SAGA patterns), RESTful APIs, OAuth2 PKCE, Social Login (Google), API Gateway, Event-Driven Architecture
- **Databases:** MySQL, MongoDB, Firebase Realtime DB, Elasticsearch, Redis (caching/session management)
- **Messaging & Streaming:** Apache Kafka (Pub/Sub)
- **DevOps & Cloud:** AWS (S3, EC2, CloudWatch), Docker, Kubernetes, GitHub Actions, CI/CD pipelines
- **Testing:** Jest, React Testing Library, React Native Testing Library, Maestro (E2E), Postman
- **Monitoring & Observability:** Prometheus, Grafana, Lighthouse
- **Methodologies:** Agile/Scrum, SOLID Principles, Design Patterns, Atomic Design Principles
- **Soft Skills:** Technical Leadership, Team Mentoring, Code Reviews, Documentation, Cross-Functional Collaboration