

# Souparno Majumder

Technical Leader — Distributed Systems Architect — AI & Cloud Expert

**Contact:** (+91) 91632 35170

**Email:** souparno.majumder@gmail.com

**GitHub:** github.com/souparno

**LeetCode:** leetcode.com/u/user9204

**StackOverflow:** souparno-majumder

---

## Summary

Dynamic and results-driven **Lead Software Architect** with over 10 years of experience designing **scalable distributed systems, cloud-native solutions, and AI-driven applications**. Proven track record of **leading cross-functional teams**, optimizing cloud infrastructure, and delivering high-impact software solutions. Adept at solving complex technical challenges and driving innovation to achieve business goals.

---

## Key Achievements

- Designed and implemented a **scalable notification service** handling **1M+ transactions per minute**, reducing latency by **30%** and improving system reliability by **25%**.
  - Reduced cloud infrastructure costs by **40%** through optimization of MongoDB clusters and migration to cost-effective solutions.
  - Built and launched an **AI-powered coding platform**, generating **INR 6 lakhs in revenue** within 2 weeks and onboarding **150+ users**.
  - Led the migration of a **monolithic system to microservices**, improving scalability and reducing deployment times by **50%**.
  - Architected and deployed **highly scalable, fault-tolerant systems** on Google Cloud Platform (GCP), leveraging **Kubernetes, BigQuery, and Pub/Sub** to handle **petabyte-scale data** with **99.99% uptime**.
- 

## Skills

- **Distributed Systems:** Scalable architectures, microservices, event-driven systems
- **Programming Languages:** Python, Node.js, Java, C#, Go, TypeScript
- **Frameworks:** Express.js, FastAPI, Spring Boot, Django, React, Angular
- **Databases:** PostgreSQL, MongoDB, MySQL, DynamoDB
- **Cloud Platforms:** AWS (Lambda, S3, EC2, CloudFormation, RDS), Google Cloud Platform (GCP), Azure
- **DevOps / CI/CD:** Docker, Kubernetes, Terraform, Jenkins, GitHub Actions, ArgoCD
- **Testing:** Unit testing, integration testing, Selenium
- **Big Data / Analytics:** Kafka, Apache Spark, ClickHouse
- **Caching:** Redis, Memcached
- **Monitoring:** Prometheus, Grafana, Instana, New Relic
- **Security:** OAuth2, JWT, IAM, Secure Software Design

- **Leadership:** Team management, project planning, stakeholder communication, agile methodologies
  - **Soft Skills:** Problem-solving, strategic thinking, mentoring, and knowledge sharing
- 

## Professional Experience

### BuxBox

**Head of Engineering — Remote/IN — Feb '25 – Present** *BuxBox is a fintech SaaS platform offering a unified pay-in and payout infrastructure for Indian merchants—enabling seamless digital collections, vendor payouts, subscription billing, and API-driven financial operations. It serves high-volume sectors like gaming, education, and ecommerce.*

- Leading the engineering team, overseeing hiring, mentoring, and onboarding of engineers and consultants to match delivery bandwidth.
- Spearheaded optimization of the core transaction service, increasing daily revenue from **INR 90L to INR 5Cr** with zero downtime during migration.
- Upgraded database infrastructure from **T-series to M-series**, enhancing performance and reliability under heavy load.
- Introduced **ClickHouse** for OLAP queries and **Redis** for caching, significantly improving system responsiveness and throughput.
- Decomposed a legacy monolith into containerized services on **AWS EKS**, modernizing the deployment pipeline.
- Ensured full **PCI DSS compliance** at the infrastructure level, reinforcing data security and industry compliance.
- Proposed and implemented **AI/ML solutions** for **threat detection** and **consumer profiling**, enhancing fraud prevention and user segmentation.
- Actively contributed to the business roadmap with **new revenue-generating ideas**, aligning engineering goals with company growth strategy.

### Ginni Systems Limited

**Consultant (Architect) — Goa, IN — March '23 - July '23**

- Designed and implemented a **\*\*cost-effective OLAP system using ClickHouse\*\***, reducing data processing costs by **\*\*40%\*\*** and improving query performance by **\*\*50%\*\*** for petabyte-scale datasets.
- Led the migration from SpiceDB and Amazon QuickSight to ClickHouse, reducing dependency costs by **\*\*30%\*\***.
- Collaborated with cross-functional teams to gather requirements, provide technical expertise, and ensure seamless integration with existing systems.
- Mentored junior engineers, providing guidance on best practices, code reviews, and knowledge sharing.

### Classplus

**Lead Backend Engineer (Architect) — Noida, IN — March '22 - March '23**

- Led a **team of 10+ engineers** to deliver high-quality software products, reducing time-to-market by **20%** through Agile methodologies and cross-functional collaboration.
- Designed and implemented a **scalable notification service** handling **1M+ transactions per minute**, reducing latency by **30%** and improving system reliability by **25%**.
- Optimized MongoDB clusters, reducing infrastructure costs by **40%** while maintaining the same load capacity.
- Implemented **DevOps practices** using Docker, Kubernetes, and Jenkins, achieving **99.99% uptime** for critical services.
- Spearheaded the migration from a monolithic architecture to microservices, improving scalability and reducing deployment times by **50%**.

## **Algo Trader in Proprietary Trading Firm**

**Kolkata, IN — Jan '20 - Jan '22**

- Developed and maintained **trading bots** for crypto platforms, achieving **15% higher profitability** through optimized trading models.
- Built bots in **C/C++** and integrated them with Python for backtesting and execution, reducing trade execution latency by **20%**.
- Designed architecture for bots to run seamlessly, ensuring **zero lag** during high-frequency trading.

## **Kitcode.io Private Ltd**

**Founder — Chief Executive Officer — Kolkata, IN — Jan '17 - Jan '20**

- Built and launched an **AI-powered coding platform**, achieving **INR 6 lakhs in revenue** within 2 weeks of launch and onboarding **150+ users**.
- Led a team of **8 engineers and marketers**, overseeing product development, market research, and platform deployment.
- Conducted market research and collaborated with Ph.D. researchers to optimize the NLP architecture, reducing response times by **25%**.
- Successfully incubated by **NASSCOM** for the AI platform.

## **Browntape Technologies Pvt. Ltd**

**Software Engineer — Goa — May '16 - Sep '16**

- Developed a **data scraping engine** that processed data from multiple e-commerce portals, enabling sellers to identify high-demand products and increase sales by **20%**.
- Administered background data processing using tools like **CakePHP, Python, Selenium, and Node.js**.

## **Hashcube**

**Software Engineer — Bengaluru, IN — Nov '14 - May '16**

- Developed a **Game Physics Engine**, improving user experience and optimizing machine resource utilization by **30%**.
- Directed the conversion of JavaScript codes into native language using **JSIO**, reducing execution time by **20%**.

## Education

- **Electronic Hons. (University of Calcutta) — Kolkata, IN — 2006 - 2009**
  - **St. Joseph & Mary's School (ISC) — Kolkata, IN — 2004 - 2006**
  - **Lycee (ICSE) — Kolkata, IN — 1995 - 2004**
- 

## Projects

- **Digital Pen** - Independently conceptualized and executed an input device for saving hand-written notes on the cloud.
- **js-lo** - A compiler for JavaScript (<https://github.com/souparno/js-lo>).
- **npm package contributions** (<https://www.npmjs.com/~bonnie>).
- **GitHub contributions** (<https://github.com/souparno>).