Souparno Majumder

Technical Leader — Distributed Systems Architect — AI & Cloud Expert

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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

- 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 - Feb '15

- 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

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

Projects

- **Digital Pen** Independently conceptualized and executed an input device for saving handwritten 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).