

# Shubh Shah

## Software Engineer | Backend & Distributed Systems

☎ +91-722-698-7403 | ✉ Email | 🔗 LinkedIn | 🐙 GitHub | ✖ X

### PROFESSIONAL SUMMARY

Performance-driven Software Engineer with over 4 years of experience specializing in architecting scalable backend infrastructures and distributed systems. Expert in Node.js ecosystems and unified database management, with a proven track record of building abstraction layers for heterogeneous databases and managing high-availability infrastructure with 99.9% uptime. Specialized in performance tuning, real-time communication systems, and system observability for large-scale enterprise applications.

### TECHNICAL SKILLS

**Backend & Systems:** Node.js, NestJS, TypeScript, Kafka, BullMQ, SQS, Redis, Microservices, RESTful APIs  
**Databases:** PostgreSQL, MongoDB, Aerospike, Elasticsearch, MS SQL Server 2019, Prisma, Strategic Indexing  
**Cloud & Infrastructure:** Docker, Kubernetes, AWS (EC2, S3, ECS, ECR), Azure, Terraform, Jenkins, Nginx  
**Languages:** JavaScript, TypeScript, Python, Rust (Learning), C++ (Basics)  
**Automation & Tools:** PowerShell, WebRTC (TURN), ELK Stack, Twilio API, Reown AppKit, Web3.js, Git  
**Frontend:** React.js, Next.js, Tailwind CSS, Shadcn UI, Material UI

### PROFESSIONAL EXPERIENCE

#### Software Engineer (Contract)

*International Engineering Contracts (USA & India)*

Aug. 2024 – Present

*Remote*

#### Enterprise Solutions & Logic Design

- **Task Management Mobile App:** Led and guided the development of a unified task management suite featuring geofenced and Wi-Fi restricted attendance tracking, an integrated **WebRTC-based calling system** with a private **TURN server**, recurring task engines, and automated analytics reports.
- **Real-Time Communication:** Engineered a custom WebRTC calling solution, including the manual setup and configuration of a private TURN server to ensure high-reliability peer-to-peer connectivity.
- **Enterprise HRMS:** Developed an attendance engine triggered by system login/logout via group policies and PowerShell scripts. Implemented tiered automated email escalations for consecutive late logins and managed a complex multi-role hierarchy with full database audit logs.
- **Gaming Analytics Platform:** Built a tracking engine with automated weekly insights and secure distribution via 5-second signed URLs for PDF previews. Engineered an Excel logic engine with modifiable tax/admin formulas and data rollback capabilities to prevent data loss.

#### High-Availability Infrastructure & Distributed Systems

- **Solana Mainnet & Testnet Validator:** Managed production-grade distributed infrastructure achieving 99.9% uptime and 99% voting accuracy. Conducted hardware optimization (NVMe health, CPU affinity) and regular software upgrades with deprecated flag management.
- **USDT Gaming Point System:** Engineered a real-time cryptocurrency settlement system; spearheaded migration from V1 to V2 with zero downtime, integrating automated audit trails and third-party APIs with robust rate limiting.
- **Presale ICO Website:** Led a team of 3 to architect a dual-wallet integration using Reown Kit and a dual RPC architecture, ensuring 100% transaction finality within a 14-day delivery window.

#### Lead Backend Developer (Contract)

*Jain Community Platform*

Sept. 2025 – Jan. 2026

*Remote*

- Architected a scalable backend ecosystem supporting 5,000+ members, featuring real-time attending visibility and role-based edit rights for events and updates.
- Developed a relationship mapping engine and searchable directories with advanced filtering, achieving sub-second latency via query normalization and strategic indexing.
- Implemented secure matrimonial portals and RSVP mechanisms with real-time participation tracking and OTP-based PII protection.

## Founder & Lead Systems Engineer

Google Maps Ranking Venture

Nov. 2023 – July 2024

Ahmedabad, India

- Conceived, engineered, and operated a proprietary SEO software designed to optimize business visibility in Google Search map widgets through organic traffic simulation.
- Developed sophisticated web crawling modules and data scraping scripts to monitor ranking algorithm updates and provide real-time performance analytics.
- Managed the full product lifecycle from independent R&D to B2B business development, successfully launching and managing trials for multiple local businesses.

## Software Engineer I

Genuin Inc.

July 2022 – Oct. 2023

Ahmedabad, India

### System Architecture & Database Engineering

- Architected the Genuin Core package, a centralized abstraction layer for Aerospike, PostgreSQL, and MongoDB, effectively decoupling data persistence from application logic across the microservices fleet.
- Spearheaded migration from SQS-based notifications to a Kafka architecture to handle high-throughput event streams with zero message loss.
- Developed standalone database connector packages to standardize data access patterns and authored Node.js migration scripts for complex legacy data transformations.
- Improved production API response times by 20% through strategic caching and implemented system observability using the ELK stack for centralized error logging.

### Leadership & Mentoring

- Mentored a team of 5 interns across backend and data science domains, enforcing production-grade code quality through detailed peer reviews and technical documentation standards.
- Led sprint retrospectives and contributed to critical architectural decisions, including the adoption of repository patterns for better code maintainability.

## Software Engineer Intern

Genuin Inc.

Jan. 2022 – June 2022

Ahmedabad, India

- Enhanced user feed relevance by optimizing Elasticsearch search algorithms and query structures, improving content discovery.
- Engineered AWS ECS configured cronjobs for automated PostgreSQL-Elasticsearch data synchronization to maintain cross-layer consistency.
- Built an asynchronous Python microservice for automated video transcript generation utilizing Boto3 and FFmpeg.
- Implemented Docker and Jenkins CI/CD pipelines to automate development workflows and streamline deployment processes.

## EARLY CAREER

---

### Cogno AI (Acquired by Exotel)

Software Tester

Remote

May 2020 – Aug. 2020

- Executed comprehensive QA for internal products (CoBrowsing, LiveChat) and developed automated regression suites using Selenium and Python for AI chatbots.
- Performed advanced security and quality checks, including SQL injection testing and NLP-based validation for multilingual chatbot interactions.

## EDUCATION

---

### Ahmedabad University

B.Tech in Information Communication Technology (Minor in Mathematics)

Ahmedabad, India

Aug. 2018 – Aug. 2022

## KEY ACHIEVEMENTS

---

**Bug Bounty Recognition:** Identified and disclosed a critical security vulnerability for JobSeeker.

**Academic Excellence:** State Rank 59 in Mathematics and State Rank 39 in Science in International Olympiads.