

SIDDHI SINGH

Backend Developer

Node.js • Express.js • MongoDB • PostgreSQL • Redis
India | siddhisingh5@outlook.com | [GitHub](#) | [LinkedIn](#) | [Portfolio](#)

PROFESSIONAL SUMMARY

Early-career backend engineer with hands-on production-style development experience across Node.js, Express.js, MongoDB, PostgreSQL, and Redis. Built secure REST APIs, authentication systems, multi-tenant applications, and asynchronous background job processing during a 6-month backend engineering internship and independent project work. Comfortable owning a problem from design through deployment.

TECHNICAL HIGHLIGHTS

- Built 5 backend systems spanning APIs, queues, gateways, and webhooks, following production-grade design patterns.
- Implemented JWT and Google OAuth authentication across multiple applications.
- Designed multi-tenant architecture with role-based access control (RBAC).
- Developed asynchronous background processing using BullMQ and Redis, including retry and dead-letter queue handling.
- Built a centralized API gateway with Redis-based rate limiting and a circuit breaker pattern.
- Secured service-to-service and webhook communication with HMAC signature verification.

TECHNICAL SKILLS

Languages: JavaScript, Java, SQL

Backend: Node.js, Express.js, REST APIs, Socket.io

Databases: MongoDB, PostgreSQL, Redis

Architecture: RBAC, Multi-tenancy, API Gateway, BullMQ, Circuit Breaker

Security: JWT, OAuth 2.0, Passport.js, Helmet, bcrypt, Rate Limiting, HMAC Verification

Developer Tools: Docker, Git, GitHub, Swagger, Postman

APIs: Gemini API, Resend, ImageKit

PROFESSIONAL EXPERIENCE

Web Developer Intern | Himritva

Jan 2025 – Jul 2025

- Engineered backend modules for a production-style application using Node.js and Express.js.
- Implemented secure REST APIs and authentication workflows for core application features.
- Collaborated on Projectify's backend architecture, including multi-tenancy and access control.
- Improved codebase maintainability by introducing modular service design and centralized input validation.

Freelance Consulting (Design & Client Delivery), 2021–2025 — part-time alongside BCA and MCA studies; 6+ client engagements covering requirement gathering, delivery, and stakeholder communication.

BACKEND ENGINEERING PROJECTS

Projectify — [GitHub](#)

Multi-tenant project management platform with Kanban workflows and real-time collaboration.

Tech Stack: Node.js, Express, MongoDB, Redis, JWT, Socket.io

- Engineered a multi-tenant architecture with role-based access control (RBAC) to isolate workspaces and permissions across teams.
- Implemented JWT and Google OAuth authentication for secure, streamlined user onboarding.
- Built real-time task and workflow updates using Socket.io for live team collaboration.
- Integrated Redis to support caching and session handling behind the platform's analytics views.

API Gateway — [GitHub](#)

Centralized API gateway for authentication, traffic control, and service routing.

Tech Stack: Node.js, Express, Redis

- Designed and built a centralized gateway to handle authentication and routing across backend services.
- Implemented Redis-backed rate limiting to protect downstream services from abuse.

- Applied the circuit breaker pattern to contain failures and improve system resilience.
- Built request proxying logic to route traffic to the correct downstream service.

Email Job Queue — [GitHub](#)

Asynchronous background job processing service for reliable email delivery.

Tech Stack: Node.js, BullMQ, Redis, PostgreSQL

- Built an asynchronous job processing pipeline using BullMQ workers and Redis queues.
- Implemented retry logic and dead-letter queues to handle failed deliveries without data loss.
- Designed a PostgreSQL persistence layer to track job state and delivery history.
- Decoupled email delivery from the main application flow to improve reliability.

Webhook Delivery Service — [GitHub](#)

Webhook delivery platform for reliable event distribution to third-party integrations.

Tech Stack: Node.js, Redis, PostgreSQL

- Built a webhook delivery platform for distributing events to external integrations.
- Implemented HMAC signature verification to secure and authenticate webhook payloads.
- Designed exponential backoff retry logic to handle delivery failures gracefully.
- Built an event persistence layer in PostgreSQL to support auditability and replay.

AI Interview Prep — [GitHub](#)

AI-assisted interview preparation platform with personalized question generation.

Tech Stack: Node.js, Express, Gemini API, MongoDB

- Developed an AI-assisted platform using the Google Gemini API to generate personalized technical interview questions.
- Implemented session management and authentication to support user-specific interview tracking.
- Built backend services to manage question-generation state and track user progress over time.

EDUCATION

Master of Computer Applications (MCA)

SNDT Women's University, 2025 — CGPA 8.0

Bachelor of Computer Applications (BCA)

SNDT Women's University, 2022 — CGPA 9.1

LEADERSHIP & ACHIEVEMENTS

- Placement Head, MCA
- President, Infomaniac IT Club
- Best Final Year Project Award
- Best Designer Award
- National-Level Infographic Competition Winner
- Department Website Designer
- College Fest Lead Organizer & Anchor