

VISHAL KUMAR

Kolkata, India | P: 7369092858 | kumarvishal823003@gmail.com | [GitHub](#) | [Portfolio](#) | [LinkedIn](#) | [Leetcode](#)

CAREER OBJECTIVE

As a backend developer, I have expertise in Node.js, REST APIs, and real-time systems seeking to build scalable, high-performance APIs and microservices for innovative platforms.

EDUCATION

Institute of Engineering and Management

Bachelor of Technology in Information Technology – 8.7/10 CGPA

Kolkata, India

August 2022 – Present

EXPERIENCE

Backend Developer Intern

January 2025 – Present

Fiel

Remote

- Developed and optimized RESTful APIs using Node.js and Express, reducing average response time by 30% through MongoDB query optimization and caching with Redis.
- Implemented a secure authentication system with JWT and role-based access control (RBAC) in Node.js, ensuring robust permission management.
- Integrated Razorpay payment gateway streamlining secure transaction processing for 1K+ weekly payments.
- Engineered a scalable notification system using Node.js and Kafka, delivering 7K+ real-time notifications weekly with high reliability.

PROJECTS

Devcord

Developer-focused collaboration platform | [GitHub](#)

January 2025 - Present

- A Discord alternative for developers using Next.js and Node.js, improving team productivity through real-time messaging and developer-focused code collaboration features
- Implemented WebSocket-based real-time chat and presence tracking and a server-channel system, supporting over 1,000 concurrent users, optimizing message delivery by 40%.
- Engineered a modular serverless architecture with Next.js App Router and server actions for type-safe CRUD operations and seamless API interactions.

API Starter Kit

Next.js 15 with PostHog Analytics | [GitHub](#)

October 2024 – December 2024

- Developed a production-ready typescript-based API template using Next.js 15, Node.js, S3 for storage and Zod for schema validation.
- Integrated PostHog for real-time analytics, tracking 10K+ events daily with minimal overhead.
- Implemented CI/CD pipelines with GitHub Actions, reducing deployment time by 50%.

Write Flow

Full-Stack Blogging App | [Live Demo](#) | [GitHub](#)

Jul 2024 – Sep 2024

- Designed and implemented a robust backend system using Next.js, and Zod validation, analytics, supporting authenticated writing, autosaving, and draft management with secure session handling.

ACHIEVEMENTS

- **Finalist in SIH'24 under ISRO:** Developed an AI-based frame interpolation system for satellite imagery, optimizing data processing pipelines.
- **Won Godspeed Track at MLH Hackbyte 2.0:** Built a real-time sign language translation model using OpenCV and ML, with efficient data streaming.
- **Won Soul AI Track at Diversion 2k25** [[GitHub](#)]: Created an AI-driven platform for mock interviews and recruiter workflows.

SKILLS SUMMARY

Backend: Node.js, Redis, Kafka, REST APIs, WebSockets, Socket.io, MongoDB, PostgreSQL, Typescript

Cloud & DevOps: Docker, Serverless, S3, AWS

Tools & Testing: Git, Jest, Mocha, Zod, Postman