

VISHWAJEET KUMAR

Software Engineer | Backend & Distributed Systems

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[LinkedIn](#) | [Github](#) | [Portfolio](#) | [Leetcode](#)

PROFESSIONAL SUMMARY

Backend-focused Software Engineer with hands-on experience building scalable, production-grade systems. Strong foundations in distributed systems, backend architecture, databases, caching, and system design. Experienced in owning services end-to-end – from design and development to deployment, optimization, and production debugging. Proven ability to work on real-world systems with measurable impact. Actively seeking Backend / Software Engineer roles in product-driven teams.

TECHNICAL SKILLS

- **Languages:** Java, Python, JavaScript
- **Backend Engineering:** Node.js, NestJS, Spring Boot, REST APIs, Microservices, WebSockets
- **Frontend:** Next.js, React, TypeScript (feature development, API integration)
- **Databases & Caching:** PostgreSQL, MongoDB, Redis (schema design, indexing, caching)
- **Distributed Systems:** Stateless services, concurrency handling, rate limiting, horizontal scaling
- **Cloud & DevOps:** AWS (EC2, S3, RDS), Docker, CI/CD (GitHub Actions), Git
- **Security & Auth:** JWT-based authentication, role-based access control
- **Computer Science:** Data Structures & Algorithms (400+ problems), OOPs, System Design (Low-Level & High-Level)

WORK EXPERIENCE

Software Developer Intern, StuFit Approach Pvt. Ltd., Lucknow

July 2025 - September 2025

- Designed and shipped scalable backend services using NestJS and PostgreSQL, supporting 2,000+ active users.
- Owned backend modules end-to-end including API design, implementation, testing, deployment, and production support.
- Optimized database queries and execution paths, achieving ~30% reduction in API latency.
- Implemented secure authentication and role-based access control (JWT + RBAC).
- Debugged and resolved production incidents, improving system reliability and user experience.
- Collaborated with senior engineers through code reviews, Agile sprints, and structured feedback.

PROJECTS

Real-Time Multiplayer Backend System - *Node.js, PostgreSQL, Redis, AWS, Socket.io* | [GitHub](#)

- Built a low-latency, distributed backend to support concurrent users in real time.
- Designed Redis-based in-memory state management to handle concurrency and prevent race conditions.
- Implemented room-scoped WebSocket communication for efficient real-time synchronization.
- Deployed stateless services to enable horizontal scaling and fault tolerance.

Distributed URL Shortening Service - *Node.js / FastAPI, PostgreSQL, Redis, AWS* | [GitHub](#)

- Designed a high-availability backend service optimized for read-heavy workloads.
- Implemented Redis caching, rate limiting, and indexed database queries to ensure low-latency redirects.
- Evaluated CAP trade-offs and system behavior under failure scenarios.

AI-Powered Code Review & PR Analysis System - *FastAPI, OpenAI, RAG, Vector Embeddings* | [GitHub](#)

- Built an AI system to analyze pull requests for code quality, complexity, and potential risks.
- Implemented RAG-based pipelines using vector embeddings for contextual and actionable insights.
- Designed modular APIs to support scalable analysis across repositories.

OPEN SOURCE CONTRIBUTIONS

LangChain – Open Source Contributor | [GitHub](#)

- Contributed to a production-grade open-source codebase, improving validation logic, inference workflows, and error handling.
- Added automated tests and collaborated with maintainers through structured code reviews.
- Worked with CI pipelines and real-world engineering standards.

EDUCATION

Bachelor of Technology in Computer Science and Engineering (AI Specialization)

University of Lucknow

SGPA: 8.10/10.00 | Nov 2022 - Jun 2026 (Expected)