

# Pritesh Srivastava

+91 9536962360 — priteshsrivastava502@gmail.com — LinkedIn Profile — Github Profile — Coding Ninjas

**Summary** — A seasoned Backend Engineering wizard with an extensive track record of building, delivering and sustaining, complex, high quality, AI/Machine Learning and system level infrastructure software products. Expert level knowledge in Backend Development, Public/Hybrid clouds and System level Infrastructure development. Vast experience working with Global Engineering teams and Infrastructure solutions.

## Skills

<b>Languages</b>	JavaScript, TypeScript, C++ , HTML, CSS, SQL	<b>Cloud</b>	AWS, Serverless, Lambda, Docker, CI/CD Pipelines, Render, Vercel, Grafana, Cloudinary, ELK
<b>Frameworks</b>	Node.js, Express.js, Nest.js, Rest APIs, GraphQL, gRPC, WebSockets	<b>Core</b>	Object-Oriented Programming, Data Structures and Algorithms, System Design, Monolithic and Microservices Architecture, Database Management System, AI Agents, Application Performance Monitoring
<b>Databases</b>	MongoDB, Redis, Oracle, PostgreSQL, ClickHouse, Elastic Search, Vector Search		
<b>Tools</b>	RabbitMQ, Kafka, OpenAI, Visual Studio, Swagger, WebStorm, GitHub, Cursor AI, CoPilot, Postman, PlantUML		

## Experience

### Lucres

Apr 2024 – Present

#### Backend Developer

##### Backend Development & API Optimization

- Optimized database queries and MongoDB aggregation pipelines through strategic indexing and pre-pagination techniques, reducing API response time and enhancing system performance by 70%.
- Followed best API development practices, implementing pagination, server-side caching, payload compression, connection pooling, and request validation for scalable and efficient APIs.
- Built custom logic for XML sitemap generation, enhancing SEO performance across the platform.
- Designed and maintained optimized data models with efficient schema structures to ensure superior performance and scalability

##### Architecture & System Design

- Architected a scalable chat feature and notification system using RabbitMQ for efficient & reliable asynchronous communication.
- Integrated Elasticsearch with optimized index mapping, analyzers, tokenization, and Query DSL, achieving highly accurate and performant search results.
- Utilized gRPC for microservices communication (core, admin, and orders services), dramatically improving inter-service performance.
- Designed system architecture blueprints using Entity-Relationship Diagrams (ERD) and PlantUML, ensuring well-structured and scalable implementations.
- Utilized AWS SDK for seamless PDF generation, downloads, and email delivery, improving document accessibility.

##### Security & Authentication

- Designed an advanced authentication system incorporating access tokens, refresh tokens, secure cookies, session-based authentication and RSA algorithm for JWT signing, securing user data and access.
- Implemented custom Google Sign-In/Sign-Up functionality without external libraries for enhanced control over the authentication process.
- Developed a comprehensive Role-Based Access Control (RBAC) system for the Admin Microservice, securing sensitive features with permission-based access.
- Implemented application monitoring using Prometheus and Grafana, enabling real-time API performance tracking and early issue detection.

##### Feature Development & User Engagement

- Implemented social media-like features including Quotes, Reposts, User Tagging, and Save functionality similar to X (Twitter), significantly boosting user engagement and platform interaction.
- Developed a subscription service enabling premium feature access, including payment processing and account management.
- Integrated OpenAI (ChatGPT) for AI-powered automation, enabling auto-generated career details, job descriptions, and content creation.
- Designed nested entities like LinkedIn, allowing users to create and manage company pages while maintaining data isolation.

- Implemented admin activity logging and a report feature to track user and admin actions, improving platform governance.

#### Automation, Infrastructure & DevOps

- Developed an AI Agent that transforms raw user input into structured data using OpenAI, automating complex database write operations to efficiently build user career profiles.
- Utilized AWS Lambda Functions and Node Cron to schedule and automate critical business processes including experience updates and job post expiration.
- Deployed ElasticSearch on AWS EC2 for development and Elastic Cloud for production, ensuring high availability and fault tolerance.
- Integrated Wati for automated messaging, improving user engagement and communication.

### **Urban Space**

**Dec 2022 – Mar 2024**

#### *Software Engineer*

- Upgraded the booking system to include advanced filtering for service types across different appliance categories.
- Developed technician-matching algorithm that reduced service assignment time by 25%.
- Created backend logic for customer review and rating system to improve quality control and optimized database queries that improved overall website response time by 30%.
- Participated in code reviews and testing procedures, helping establish best practices for the development team.

#### *Software Engineer Intern*

- Assisted in developing REST APIs for customer service booking system, gaining hands-on experience with Node.js and Express.
- Built Admin dashboard components to display daily service requests and completion statistics and reporting APIs to generate daily and weekly service performance metrics.
- Developed backend logic for notification system to alert customers about appointment confirmations.

### **Web Rats**

**May 2022 – Oct 2022**

#### *SDE Intern*

- Developed and maintained responsive web interfaces using HTML, CSS, and JavaScript for 3 client-facing applications across e-commerce and service domains.
- Built RESTful APIs using Node.js, Express, and MongoDB, enabling seamless CRUD operations and user authentication for multi-tenant platforms.
- Created email notification system using Nodemailer to send automated updates for user sign-ups, purchases, and support tickets.
- Participated in daily Agile stand-ups, sprint reviews, and code reviews; resolved 10+ bugs during QA feedback cycles.

## **Education**

---

### **ABES Engineering College**

*Bachelor of Technology — GPA: 7.2*

*Minors: Operating Systems, Data Structures, Analysis of Algorithms, Software Development, Networking, Databases*

### **Certifications**

- freeCodeCamp - Back End Development and APIs — [Link](#)
- HackerRank - Rest API (Intermediate) — [Link](#)

## **Projects**

---

### **Sampurna Kart (E-Commerce Website)**

- Website that is specifically tailored for Sampurna Kart, a reputable appliances repair company.
- It provides a comprehensive online platform to showcase their key services, enabling customers to conveniently access their exceptional appliance repair solutions.
- Designed and developed core backend components, ensuring seamless functionality and an excellent user experience. Handled API calls and validations.
- It provides a comprehensive online platform to showcase their key services, enabling customers to conveniently access their exceptional appliance repair solutions.  
[Deployed Link](#)

### **Real-Time Chat Web App**

- Developed a real-time chat application using Node.js and Socket.IO to facilitate instant communication between users.
- Designed a responsive and intuitive user interface for seamless user experience.
- Demonstrated proficiency in backend development, event-driven programming, and real-time communication technologies.  
[Deployed Link](#) *(Due to Render's free tier limitations, the web page may have increased response times.)*