

Samarth Verma

+91 9555514068 | anandverma2804@gmail.com | [LinkedIn](#) | [Github](#) | [Portfolio](#) | Hyderabad, India

Education

National Institute of Technology (NIT), Meghalaya

Nov 2020 – June 2024

Bachelor of Technology in Electronics and Communication (GPA: 9.45 / 10)

Shillong, India

- **Relevant Coursework:** DSA, OOP, Database Management (DBMS), Operating System, Computer Network

Skills

Programming Languages: Java, Python, C, C++, JavaScript, TypeScript

Databases: SQL (MySQL, Microsoft SQL Server, PostgreSQL), NoSQL (Redis, MongoDB)

Frameworks and Libraries: Spring Boot, Spring Cloud, Spring Data JPA, Hibernate ORM, Liquibase, Jakarta EE (J2EE), JUnit, Mockito, RESTful APIs, GraphQL, SOAP, gRPC

Web Technologies: React.js, Redux, Node.js, Express.js, Bootstrap, Tailwind CSS, HTML, CSS

Tools and Technologies: Git/GitHub, Unix/Linux, Docker, Jenkins, Kubernetes, Maven, IntelliJ IDEA, VS Code, Postman, Tomcat, Azure AI, AWS (EC2, S3, Lambda, DynamoDB), Apache Kafka, RabbitMQ

Others: Data Structures and Algorithms (DSA), Object Oriented Programming (OOP), Design Patterns, SOLID Principles, Microservices Architecture Design, Performance Optimization and Scalability, Agile, Scrum, Code Review, SDLC, TDD, Artificial Intelligence (AI) & Machine Learning (ML), System Troubleshooting & Debugging, CI/CD, Operating System, Distributed System, Cloud Computing, Shell Scripting, Documentation, Unit Testing, Integration Testing

Soft Skills: Leadership & Mentoring, Creativity & Innovation, Attention to Detail, Collaboration, Problem-Solving, Analytical and Quantitative Skills, Interpersonal Skills, Teamwork

Experience

Software Engineer (Specialist Programmer)

Jul 2024 – Present

Infosys Ltd.

Hyderabad, India

- Played a key role in transforming a monolithic Spring Boot application into a **microservices architecture**, implementing load balancing (**Azure Load Balancer**) and service resilience (**Resilience4j**), resulting in **25% faster API response time**, **30% reduction in server load**, and improved **scalability** and **resource efficiency**.
- Developed the **Payments Service** and **Authentication Service** from the ground up in **less than 2 months**, single handedly integrating the **SETU UPI Payment Gateway** to diversify payment options.
- Implemented a **rate limiter** for a critical service responsible for external communications, achieving a **10% reduction** in dropped requests and improving overall consistency.
- Designed and implemented **20+ GraphQL** and **40+ REST APIs** to support various application features, improving data access efficiency and **reducing response times** by **30%**. Integrated **Google Maps APIs** to enable advanced geolocation functionalities, including Autocomplete and Reverse Geocoding.
- Developed a sophisticated **Search and Suggestion Functionality** using **Azure Cognitive Search**, enabling users to search products in nearby stores and helping store owners efficiently navigate product catalogs. Furthermore, utilized **Redis** for caching to reduce database calls by **70 - 80%**.
- Wrote extensive **unit tests** (160+) for **all service-layer methods**, and **integration tests** (40+) ensuring code quality and application reliability, while significantly increasing test line coverage to **over 95%**.

Projects

Log Ingestor and Query Interface | Java, Python, Spring Boot, Apache Kafka, MongoDB, OpenAPI

- Developed a **scalable** Log Ingestor System that can efficiently handle **vast volumes of log data**, and a Simple Interface for efficiently querying this data.
- Integrated **Apache Kafka** for real-time log streaming, OpenAPI (**Swagger UI**) for interactive queries, and optimized MongoDB **indexing** and aggregation for efficient **full-text search** and field-based filtering.

Scalable E-Pharmacy Platform | Spring Boot, Spring Cloud, MySQL, React, Redux, TypeScript

- Implemented a microservices architecture, linked through a centralized **API gateway**, to support efficient medicine **search and transaction processes**. Utilized MySQL for data management and Tailwind CSS for responsive design, ensuring high system **resilience**, **load balancing** and secure user interactions.
- Developed a responsive React frontend with features like user registration, secure transactions, and **real-time order tracking**.

AI Enhanced Database Interaction Tool | *Python, Flask, MySQL, React, Azure AI Services*

- Developed an AI-driven application leveraging **Azure AI** for efficient text-to-SQL and SQL-to-text conversions, optimizing database querying processes and enhancing data presentation through structured query results.
- Engineered a secure, **role-based access control** system to enforce data visibility restrictions and implemented security protocols to block unauthorized **DML operations**.

Velocity Estate: Property Search and Management System | *React, Redux, MongoDB, Express.js, Node.js, Tailwind CSS*

- Built a MERN stack-based real estate platform with full **CRUD functionality** for property and user management, featuring advanced search, filtering, and sorting for improved user experience and engagement.
- Implemented **Google OAuth** and **JWT-based authentication** & authorization, ensuring secure user profile management with seamless creation, updates, and deletion, enhancing platform security and access control.

Achievements & Leadership

Leetcode: Ranked in the **top 3%** on Leetcode (**Knight, 1900+ rating**), solving 700+ algorithmic problems.

Codeforces: Specialist (1400+ rating) on Codeforces, solving 250+ competitive programming problems.

GeeksForGeeks: Ranked 1st at NIT Meghalaya with a score of 1650+ and solved 500+ data structures problems.

District Science Exhibition: Secured 2nd place for designing an **Automated Car Parking System**, demonstrating strong problem-solving and engineering skills.

Coding Club Head: Organized monthly coding contests to foster problem-solving and collaboration among peers.

Web Dev Coordinator: Managed the Robotics club's website, provided guidance to junior members, and organized events and workshops.