

Vinit Singare

+91 9322810026 | vinitsingare05@gmail.com | Maharashtra, India | [linkedin.com/in/vinitsingare](https://www.linkedin.com/in/vinitsingare) | github.com/vinitsingare | vinitsingare.vercel.app/

Summary

Backend-focused Computer Science student with a minor in AI/ML, passionate about building scalable systems and solving complex problems. Experienced in Java, Spring Boot, and Node.js, with a strong foundation in backend development and system design. Focused on understanding systems from first principles, including networking and database internals. Actively working toward becoming a backend engineer with interests in distributed systems and performance optimization.

Education

Bachelor of Technology (B.Tech) in Computer Science
and Engineering (AI & ML)

Jawaharlal Nehru Engineering College

Maharashtra, India

Expected Graduation: 2027

Experience

AI/ML Internship

Adverk Technologies

Feb 2025 – April 2025

Chh Sambhaji Nagar, India (Remote)

- Built a machine learning model to predict student performance (pass/fail) using the UCI dataset with 395 records and 30+ features
- Performed data preprocessing, exploratory data analysis, and feature correlation analysis using Pandas and visualization techniques
- Implemented Decision Tree and Random Forest models, achieving up to 70% accuracy with improved generalization
- Identified key performance factors such as failures, study time, and absences through feature importance analysis
- Gained hands-on experience in model evaluation, classification metrics, and reducing overfitting

Technical Skills

Programming: C++, Java, Python, JavaScript

Core Concepts: Object-Oriented Programming, Data Structures & Algorithms, Operating System, Computer Networks, DBMS, System Design, REST API Design, Distributed System

Technologies: Springboot, nodejs, react, Vite, MySQL, MongoDB, Blockchain, Django

Tools: Git, GitHub, Vercel, VS Code, Command Line, Postman, Docker, Kubernetes

Projects

UDP Latency Optimization Tool

- Built a Go-based system to measure and compare direct vs relay network latency (RTT)
- Deployed UDP servers on a cloud VPS to simulate real-world network conditions
- Analyzed packet flow and routing behavior to understand latency differences
- Gained hands-on experience with low-level networking and performance analysis

AgriChain – Blockchain-based Supply Chain System

- Designed and developed a secure supply chain system for agricultural products using blockchain concepts to ensure transparency and data integrity
- Built backend services using Node.js and Express.js to manage product tracking, transactions, and user interactions
- Implemented traceability features to track product movement across different stages of the supply chain
- Focused on data authenticity and tamper-resistant record handling using blockchain principles

Payment Service (PayPal Clone – Microservices Architecture)

- Designed and developed a payment processing system using Spring Boot microservices architecture
- Implemented asynchronous communication between services using Apache Kafka for reliable transaction handling
- Built REST APIs for user management, transactions, and payment workflows
- Designed loosely coupled services to improve scalability, fault isolation, and maintainability
- Focused on real-world backend patterns such as event-driven architecture and service communication