

## Skills

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**Languages:** Java, JavaScript (Node.js), C++, PHP

**Backend Frameworks:** Spring Boot, Node.js

**APIs:** RESTful API design, authentication, versioning

**Databases:** Mysql, PostgreSQL, MongoDB, Redis (caching, pub/sub)

**Messaging Queues:** Kafka, RabbitMQ (microservices, async processing)

**Real-time Communication:** Socket.IO (WebSockets)

**DevOps Infrastructure:** NGINX (reverse proxy, load balancing), Docker, AWS (EC2, S3), Git, GitHub

**CS Fundamentals:** Data Structures Algorithms (500+ LeetCode), OOP, System Design (scalability, high availability), Networking (HTTP, TCP/IP)

## Experience

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### Collegedunia pvt ltd

*Software Developer*

*Sep 2024 – Present*

- Engineered a high-performance search and filtering pipeline for StudyAbroad listings using **Node.js**, **Elasticsearch**, **Redis**, and optimized **MySQL**; achieved over 3x faster search response, 45% lower load times, and 50% better data retrieval accuracy through smart caching and geo-filter optimization.
- Built and integrated a robust fee management module across CMS and API using **Node.js**, **Express.js**, and **RabbitMQ** for background task processing; improved fee data accuracy by 50%, automated article generation (saving 6+ hours/week), and reduced manual intervention by 75%.
- Refactored critical backend logic and implemented reliable queue-based processing with **RabbitMQ** in a **Node.js** microservice setup; fixed major API bugs, reduced error rates by 60%, and supported real-time features for international program listings that led to a 30% increase in user engagement.

### Vaco Binary Semantics LLP (*Experience Letter*)

*Associate Software Engineer*

*Sep 2023 – Apr 2024*

- Developed a high-performance search and filtering pipeline for StudyAbroad listings using **Java**, **Spring Boot**, **Hibernate**, and **PostgreSQL**; integrated with **Redis** for caching and significantly reduced search latency by 45%, improving data retrieval accuracy by 50%.
- Built and deployed a modular fee management system using **Spring Boot** and **RabbitMQ** for background task processing; improved data consistency by 50% and automated fee article generation, saving 6+ hours/week and reducing manual overhead by 75%.
- Refactored legacy backend logic in a microservices setup using **Spring Boot** and integrated **Kafka** for asynchronous event processing; improved system reliability and reduced API error rates by 60%. Applied SOLID principles and design patterns to ensure maintainability and scalability.

## Projects

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### Disaster Management System

*Node.js, Next.js, Gemini API, Google Maps, Socket.IO, Twitter API*

- Developed a real-time disaster management system using **Node.js** for backend and **Next.js** for frontend; integrated **Gemini API** for photo-based disaster verification, extracted location data with **Google Maps API**, and implemented live updates using **Socket.IO**. Pulled real-time disaster alerts from **Twitter API** and synchronized resource updates from government websites, enabling faster response coordination and enhanced situational awareness.

### Good Network (In Progress)

*Spring Boot, Spring Security, Spring Data JPA, JDBC, Lombok, Next.js*

- Building a secure donation management system where raised funds are programmatically distributed across a defined network; backend developed using **Spring Boot** with **Spring Security** for authentication, **JPA** and **JDBC** for persistence, and **Lombok** for clean code. The frontend is being developed in **Next.js** with a focus on seamless user experience and admin-level fund tracking.

## Achievements & Certifications

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- Solved 500+ DSA problems and achieved 1500+ rating on LeetCode. (*View Profile*)
- Built multiple production-grade features and backend microservices during full-time role, contributing to system performance, reliability, and scalability.
- Awarded **AI for Beginners Certificate** by **HP Life** for completing foundational coursework in Artificial Intelligence. (*View Certificate*)

## Education

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Maharishi Dayanand University, Gurugram

B.Tech

*Jul 2020 – Jul 2024*