Vinod Sharma

work.vinodsharma23@gmail.com | LinkedIn | GitHub | Portfolio

PROFESSIONAL SUMMARY

- Backend Software Engineer with 2+ years of experience architecting secure, distributed systems. Specialized in Java Spring Boot microservices, cloud infrastructure (AWS/GCP), and database optimization. Proven success in reducing system latency by 60% and maintaining 99.9% uptime for enterprise-grade applications.

TECHNICAL SKILLS

Backend Engineering: Java (Spring Boot), Microservices, Python, Node.js, RESTful APIs, System Design
Data & Security: SQL (PostgreSQL, MySQL), MongoDB, OAuth 2.0, SAML, JWT, Redis
Infrastructure: AWS Certified Solutions Architect, Docker, Kubernetes, Nginx, Linux, CI/CD, Apache Kafka

PROJECTS

Secure SaaS Platform Architecture | *PostgreSQL, Auth, System Design*

- **System Design:** Architected a CRM platform using **Supabase (PostgreSQL)** for relational data storage, designing complex schemas to handle user contacts and application tracking.
- **Security & Auth:** Implemented secure authentication flows using **NextAuth** (Google OAuth provider), managing session tokens and user identity verification.
- **Background Jobs:** Developed a scheduled task system (Cron) to monitor database states and trigger automated email workflows for user follow-ups after 3 days of inactivity.
- **API Integration:** Integrated external AI services (**Gemini API**) and search tools via server-side API routes to process unstructured data into structured insights.

Distributed Microservices Lab | *Java, Spring Boot, Linux*

- Designed and managed containerized microservices using Docker and Linux, ensuring 99.9% uptime for research platforms.
- Reduced latency by 60% with Nginx load balancing and API optimization, improving throughput by 40% on distributed systems.

EXPERIENCE

Software Engineer (Graduate Fellow) Dec 2024 – June 2025
DePaul University *Chicago, IL*

- Architected REST API-driven microservices using **Spring Boot** and Node.js, deployed on GCP to build scalable, cloud-native solutions.
- Implemented enterprise security protocols including Role-Based Access Control (RBAC) with **OAuth** and **SAML**, ensuring compliance with data privacy regulations.
- Automated complex data synchronization workflows for 200+ users via third-party API integrations, reducing manual operational load by 50%.

Software Engineer (Backend & Infrastructure) June 2024 – Nov 2024
DePaul University - IRL Lab *Chicago, IL*

- Developed backend services with **Java (Spring Boot)**, integrating JWT authentication for secure service-to-service communication.
- Reduced system latency by 60% by implementing **Nginx** reverse proxies and load balancing strategies for distributed systems.
- Managed containerized services on **Linux** using **Docker**, ensuring 99.9% uptime for critical research platforms.

Software Developer Intern Feb 2023 – June 2023
Innomatic Research Lab *Hyderabad, India*

- Enhanced legacy backend modules through performance tuning and database indexing (MongoDB), boosting system throughput by 25%.
- Collaborated in Agile sprints to establish backend coding standards and architectural patterns for maintainability.

EDUCATION

DePaul University   Chicago, IL
Master of Science in Computer Science   *June 2025*
- **Relevant Coursework:** Distributed Systems, Object-Oriented Software Development, Database Management Systems.

Gujarat University   India
Bachelor of Computer Applications   *May 2022*

CERTIFICATIONS

- **AWS Certified Solutions Architect – Associate**