Vinod Sharma

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

PROFESSIONAL SUMMARY

- Software Engineer with 2+ years of experience building scalable full-stack systems. Expertise in Python, TypeScript, and React with a focus on optimizing latency, reliability (99.9% uptime), and CI/CD pipelines. Proven success in replacing legacy tools with custom solutions, reducing costs, and automating workflows, AWS Certified.

EDUCATION

DePaul University — Chicago, IL
Master of Science in Computer Science — *Sep 2023 – June 2025*

- **Relevant Coursework**: Object-Oriented Software Development, Distributed Systems, Principles of Database Management Systems, Data structures & Algorithms.

Gujarat University — Gujarat, India
Bachelor of Computer Applications — *April 2019 – May 2022*

EXPERIENCE

Graduate Assistant – Full-Stack Developer — December 2024 – June 2025
DePaul University — *Chicago, IL*

- Architected REST API-driven microservices using Spring Boot and Node.js/Express, deployed on GCP for scalable, cloud-native solutions.
- Automated data synchronization for 200+ users with third-party API integrations, reducing manual errors by 50%.
- Implemented role-based access control (RBAC) with OAuth and SAML, improving security and compliance.
- Delivered a responsive React frontend, optimized for accessibility and performance.

Teaching Assistant — September 2024 – December 2024
DePaul University — *Chicago, IL*

- Instructed 2-3 classes in web networking (HTTP/HTTPS, DNS, IPv4/IPv6) and full-stack development concepts.
- Taught REST APIs, WebSockets, Nginx reverse proxy, authentication (API keys, JWT), and rate limiting.
- Mentored students in React.js, Angular, React Native, and Express.js/Node.js server setup and communication.
- Provided technical support and code reviews, improving student understanding by 40%.

Software Engineer - On Campus — June 2024 – November 2024
DePaul University — IRL Lab — *Chicago, IL*

- Developed backend services with Java (Spring Boot) and Node.js, integrating JWT/OAuth/SAML authentication for enterprise applications.
- Reduced latency by 60% with Nginx load balancing and API optimization, improving throughput by 40% on distributed systems.
- Engineered CI/CD pipelines with GitHub Actions and Docker, enabling 8x faster deployments with zero downtime.
- Designed and managed containerized services on Linux, ensuring 99.9% uptime for research platforms.

Full-Stack Web Developer – Intern — Feb 2023 – June 2023
Innomatic Research lab — *Hyderabad, India*

- Developed full-stack applications with React.js (TypeScript), Node.js/Express, and MongoDB; collaborated in Agile sprints, contributing to architecture discussions and experimenting with new technologies to optimize athlete-facing experiences.
- Enhanced legacy modules through performance tuning and database optimization, boosting throughput by 25%.
- Collaborated in Agile sprints, leading code reviews and establishing coding standards for maintainability.

Projects

AI-Powered Code Analyzer   Live Demo
  * Developed and deployed a web application with Next.js, React, and TypeScript for AI-driven code analysis.
  * Enabled users to upload code files and receive instant insights on security vulnerabilities, performance bottlenecks, and best practice improvements.
  * Integrated OpenAI APIs and machine learning models for deep code analysis, delivering real-time insights on performance and security.

Break Reminder Chrome Extension   Live Demo
  * Built with React.js and TypeScript, serving 1000+ active users; focused on creating intuitive user interfaces and reliable web services with real-time scheduling.
  * Integrated REST APIs with fallback mechanisms, achieving 99.9% reliability.

Certifications

  * **AWS Certified Solutions Architect – Associate**   Certificate

Technical Skills

Languages: Java, Python, TypeScript, JavaScript, SQL, HTML/CSS

Backend: Spring Boot, Node.js, Express, FastAPI, Microservices, RESTful APIs, JWT, OAuth, SAML

Frontend: React.js, TypeScript, Redux, Next.js, Angular

Databases : PostgreSQL, Cassandra, MongoDB, MySQL, Redis

Cloud & Tools : AWS, GCP, Azure, Docker, Kafka, Spark, Nginx, Git, CI/CD (GitHub Actions), JUnit, Jest, Linux, Load Balancing, SSL/TLS