Vishal Manchikanti

About

Software Engineer with hands-on experience building distributed, scalable web applications using Java, Spring Boot, Python, and cloud tools. Strong foundation in OOP, RESTful API design, and microservices architecture. Seeking to contribute to high-impact systems.

Work History

Full Stack Developer | Texas Tech University

Oct 2023 - May 2025

- Developed and maintained internal applications for IT Help Central using JavaScript, PL/SQL, and Python, enhancing operational efficiency for over 1,000 university users.
- Automated complex workflows with Python and Git, reducing manual tasks by 40% and boosting team productivity.
- Optimized database performance and resource usage in PL/SQL-based systems, contributing to backend performance engineering efforts and reducing system response times by 25%.
- Collaborated with cross-functional teams to reduce process inefficiencies, achieving a 30% drop in manual data processing.

Software Engineer Intern | LTI Mindtree

June 2022 - May 2023

- Developed RESTful APIs using Java, Spring Boot, PostgreSQL, and Docker, handling 50K+ daily requests and boosting scalability by 35%.
- Built scalable backend services using Java and Docker, achieving 99.9% uptime and improved throughput by 35%.
- \bullet Enhanced software quality through comprehensive unit testing with JUnit and Mockito, resulting in a 50% reduction in bugs and improved code reliability.
- Contributed to faster development cycles through hands-on Cloud and DevOps experience.

Technical Projects

Smart TaskFlow - AI-Powered Task Manager | React.js, FastAPI, PostgreSQL, OpenAI API, AWS

- Built a full-stack task management app using React.js, FastAPI, and PostgreSQL, offering smart task suggestions powered by OpenAI API, with features like role-based access and JWT-based authentication.
- Deployed using Docker and hosted on AWS EC2/S3, implementing CI/CD for scalable and secure deployment workflows.
- Outperforms basic to-do apps by integrating AI for personalized insights, boosting user productivity with intelligent task handling and real-time analytics.

DevConnect - Portfolio & Blogging Platform for Developers | Next.js, TypeScript, MongoDB, Firebase Auth, Vercel

- Developed a community platform using Next.js (TypeScript), Node.js, and MongoDB, where developers can showcase portfolios, publish blogs, and connect via comments.
- Integrated Firebase Auth for secure login, used Tailwind CSS for responsive UI, and deployed on Vercel with serverless architecture.
- Provides a modern, real-time experience with markdown support and theming, surpassing static portfolio sites with social features and developer engagement tools.

HealthBridge - Microservices Healthcare Platform | Java, Spring Boot, RabbitMQ, Redis, MySQL

- Engineered a healthcare solution using Java Spring Boot microservices, with services for appointments, authentication, medical records, and doctor availability.
- Implemented asynchronous job scheduling with RabbitMQ and optimized data access with Redis caching, improving throughput and enabling fault-tolerant resource handling across microservices.
- Designed for high availability and scalability, ensuring faster performance and greater fault isolation over monolithic healthcare systems.

Education

Texas Tech University | Master's in Computer Science – GPA: 3.75 MVSR College of Engineering | Bachelor's in Computer Science – GPA: 3.33 Aug 2023 – May 2025

Aug 2019 – June 2023

Skills

- * Frontend: JavaScript (ES6+), HTML5, CSS, TypeScript, React.js, Next.js, Tailwind CSS
- * Backend: Java, Python, Node.js, Spring Boot, FastAPI, Django, RESTful APIs, Object Oriented Design
- * Databases and Cloud: MySQL, PostgreSQL, MongoDB, Redis, AWS (EC2, S3), Firebase
- * Tools and DevOps: Git, Docker, Jenkins, RabbitMQ, Swagger, CI/CD, GitHub, Vercel
- * Methodologies: Microservices Architecture, Agile Development, OOP, SDLC, Test-Driven Development, Cross-Functional Collaboration