

VINAY VARMA

SOFTWARE ENGINEER

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EDUCATION

Master of Science, Computer Science

August 2022 – Present

George Mason University, Fairfax, VA

Bachelor of Technology, Computer Science & Engineering

August 2016 – September 2020

Jawaharlal Nehru Technological University Hyderabad, India

TECHNICAL SKILLS

Programming Languages: Java, Python

Web Technologies: XML, Ajax, html5, JavaScript, JQuery, JSON, React JS, Angular JS, Node JS, Bootstrap CSS

Development: Node JS, Bootstrap, Express, SQL, GraphQL, Redux, Django, MongoDB, PostgreSQL, API

Tools & DevOps: Postman, Jenkins, Jira, EC2, Git command line, AWS, Mocha, Kafka, Scrum, Eclipse, IntelliJ

Databases: Oracle SQL, MySQL, PostgreSQL, MongoDB, SQLite

PROFESSIONAL EXPERIENCE

George Mason University

Virginia, USA

Graduate Teaching Assistant

September 2023 – Present

- Evaluated fair and consistent grading of 100+ assignments and examinations, adhering to established rubrics
- Conducted over 10 review sessions and study groups per semester, with an average attendance of 20 students per session

IBI Group

Telangana, INDIA

Software Development Engineer

August 2019 – July 2022

- Developed and implemented robust CI/CD pipelines, code review processes, and test automation frameworks, accelerating deployment velocity by 60% while maintaining high code quality standards
- Successfully spearheaded a cross-functional software development team, delivering a high-stakes \$1.2 million project on time and within budget, adhering to industry-standard SDLC methodologies
- Introduced Redux for centralized state management and TypeScript for enhanced type safety in large-scale React applications, leveraging modern JavaScript tooling (ES6, NPM, webpack) and testing frameworks (Chai, Mocha) to boost developer productivity
- Engineered JavaScript and Python solutions that streamlined workflows and boosted employee efficiency by 30%
- Championed the integration of Python and C scripts for automating unit tests, reducing overall testing time by 50% and ensuring comprehensive code coverage
- Optimized code efficiency by 20% through effective debugging, troubleshooting, and refactoring, ensuring robust and reliable software delivery
- Architected and designed high-performance, scalable cloud-based applications using Java, Spring Boot, and .NET MVC, boosting application performance by 50% for over 50,000 concurrent users
- Implemented centralized authentication using Spring, reducing redundant identity management by 70% across multiple applications
- Ensured high availability and seamless horizontal scalability of 80 Java Spring Boot microservices deployed on AWS ECS via Docker and Kubernetes containerization

PROJECTS

NSpace Asset Management

July 2021 – July 2022

- Led the creation of a highway assets management system leveraging React functional components with hooks and Redux, resulting in a 10% increase in system reliability and a 20% reduction in bug resolution time
- Enhanced app performance by 40% through the implementation of React hooks, Redux, and React Router in the development
- Followed front-end best practices with **Redux-Sagas**, cutting state management time by 55%

CurbiQ Digitization of CurbSide Regulations

March 2020 – July 2021

- Integrated **Node.js** micro services for seamless communication with internal and external 3rd party services via REST APIs
- Engineered innovative full-stack web applications with ReactJS and Django, including the design and implementation of 100+ API endpoints for efficient data exchange between frontend and backend systems
- Deployed a model for identifying parking spaces within the given image using YOLO algorithm for feature detection to determine the empty parking spots

NECE Toll Management System

August 2019 – March 2020

- Achieved 90%+ accuracy in vehicle processing through C# and .NET MVC architecture principles, ensuring seamless and secure toll operations
- Successfully processed approximately 1 million transactions daily, managing around 1 TB data using SQL databases