**Vinay Varma**

**Front End Software Developer**

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**EDUCATION:**

**Master of Science in Computer Science 08/2022 – 05/2024**

George Mason University, Fairfax, Virginia, USA

**Bachelor of Technology in Computer Science and Engineering 08/2016 – 09/2020**

Jawaharlal Nehru Technological University, Hyderabad, India

**WORK EXPERIENCE:**

**Vanguard 09/2024 - Present**

***Software Development Engineer***

* Improved tax optimization workflow by implementing Python multi-threading and K-means clustering algorithm, deployed via AWS ECS, resulting in a 20% reduction in processing time for the client.
* Updated Vite build configuration for a React-Flask application, removed redundant npm packages, and implemented lazy loading, reducing build and deployment time by 2–3 minutes.
* Designed and implemented a WebSocket-based solution to display live progress on a React front-end, reducing user query response time by 30% while monitoring tax optimization processes executed on a Flask back-end.

**George Mason University 09/2023 – 11/2024**

***Graduate Teaching Assistant***

* Evaluated over 100 assignments and examinations, ensuring fair and consistent grading by adhering to established

rubrics, which improved grading accuracy by 20%.

* Conducted 10+ review sessions and study groups per semester, averaging 20 students per session, which increased

student performance and engagement by 30%.

**IBI Group 08/2019 – 07/2022**

***Software Engineer***

* Developed and deployed new user stories and features with high quality, adhering to coding standards, focusing on full-stack with security, reliability, and operational efficiency, reducing production incidents by 40%.
* Enhanced application performance by 40% by implementing React hooks and optimizing state management, contributing to a cloud-hosted React application.
* Took ownership of system designs, ensuring reliability and availability, and identified and mitigated potential failure modes, maintaining scalable frontend applications using Webpack and Gulp for optimizations.
* Utilized React, ES6, TypeScript, and Vue.js to translate user stories into functional components and applications, including building NPM modules.
* Led the scrum process in an agile development environment, resulting in a 20% increase in project delivery efficiency.
* Experience with frontend and backend technologies, understanding responsive design principles, code pipeline, CI/CD integration, API management, and cross-browser compatibility.
* Enhanced data management efficiency and improved system scalability, ensuring robust monitoring through UI logs monitoring with Splunk UI.
* Led the specification and development of software solutions with responsive design, sprint planning, and teamwork, resolving complex problems and reducing debugging time by 30% with unit testing tools like Chai, Mocha, and Jest.
* Collaborated with cross-functional teams and product owners to transform UX designs into actual implementations, improving the user interface and achieving a 35% increase in user satisfaction.

**Code-Now 07/2018 – 08/2019**

***Software Engineer***

* Delivered key initiatives as a JavaScript Developer within an agile project environment, providing technical insights and expertise in Nodejs microservices, accelerating project timelines by 20%.
* Developed scalable web applications using React, TypeScript, Node with AWS and created reusable headless libraries in plain JavaScript, reducing code duplication by 30% and improving maintainability.
* Experience with SASS, unit testing with Jest, Mocha, Tape, and other JS testing frameworks.
* Familiarity with DevOps and Agile principles, CI/CD (Gitlab CI, Jenkins, CodePipeline, Circle CI), Infrastructure-as-Code (Terraform, CloudFormation), and public cloud services integration.

**TECHNICAL SKILLS:**

* ***Programming Languages:*** JavaScript, TypeScript, Java, Python, HTML, CSS
* ***Development Frameworks:*** React JS/Redux, Spring Boot, NodeJS, GraphQL, SASS/SCSS/LESS, ES6
* ***Databases:*** SQL Server, MySQL, PostgreSQL, MongoDB, PL/SQL
* ***Cloud Technologies:*** AWS (DynamoDB, Cloudwatch. Lambda, S3, EC2, IAM), GCP
* ***Other Tools:*** Docker, Kubernetes, Jenkins, Tableau, Github, Git, Postman, Jira, IntelliJ, Version Control
* ***Methodologies:*** Agile methodologies, Test-Driven Development (TDD), Continuous Integration/Continuous Deployment (CI/CD pipelines)

**PORJECTS:**

**George Mason University – CS (642) 09/2023 – 12/2023**

**Course Registration Platform**

* Led a team of 4 developers in building a scalable course registration platform, focusing on front-end development using React and Redux for state management.
* Designed and implemented over 50 dynamic UI components, ensuring seamless user experience and responsiveness across various devices.
* Developed and integrated RESTful APIs using Django to facilitate smooth communication between the frontend and backend systems.
* Utilized PostgreSQL for efficient data management and AWS for deployment and hosting, ensuring a secure and reliable production environment.

**Tech Stack**: React, Redux, Python, Django, PostgreSQL, AWS

**George Mason University 05/2023 – 07/2023**

**Portfolio**

* Designed and developed a personal portfolio website for a Bi-Tech professor using React, completing the project within 4 weeks.
* Focused on creating a responsive and visually appealing frontend, ensuring the site looked professional and worked seamlessly across various devices.
* Deployed the website on AWS S3 for efficient rendering and quick access and implemented minor post-launch adjustments based on client feedback.

**Tech Stack**: React, AWS S3

**IBI Group 01/2022 – 07/2022**

**TPA**

* Led the creation of UI dynamic forms, reducing the load on clients by 50% by leveraging React functional components with hooks and optimizing lazy loading, resulting in a 20% improvement in page response times and a 10% reduction in deployment time.
* Designed multi-tenancy architecture using Django, Python, PostgreSQL for both USA and Canadian clients.
* Architected a comprehensive full-stack application that efficiently adopted advanced strategies such as OAuth for secure user authentication, AES encryption for data protection, and Azure SQL, facilitating reliable and efficient data exchange.
* Monitored application health and performance using AWS CloudWatch, setting up custom metrics and alarms for proactive issue resolution.

**COURSES AND CERTIFICATIONS:**

* Certification of Merit by Government of Telangana 2018, A State level Hackathon State runner-up
* Certified JavaScript Developer - Udemy 2019
* Certified in React (Basic) - HackerRank 2019
* Certified in React (Intermediate) - HackerRank 2019
* Certified in Python (Basic) - HackerRank 2019
* Certified Software Development Intern - IBI Group: 2019-2020
* Certified Python Developer (Intermediate) - HackerRank: 2020
* Certified Problem Solving (Intermediate) - HackerRank: 2020
* Certified JavaScript (Intermediate) - HackerRank: 2020
* Certified Front-End UI Developer - Coursera, 2020
* Completed multiple Python courses - Coursera 2020
* Certificate of merit in Cyber Security Workshop 2020