

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)

PROJECTS:

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