Varun Hosadurga Harish (Open to relocation)

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Education

Stony Brook University   Aug 2023 - May 2025
Master of Science in Computer Engineering (GPA: 3.9 / 4.00)   *Stony Brook, New York*

RNS Institute of Technology   Aug 2016 - Jul 2020
Bachelor of Engineering in Electronics and Communication Engineering (GPA: 8.7 / 10)   *Bengaluru, India*
- **Relevant Coursework:** Data Structures and Algorithms (Java), Computer Vision, Practical ML and AI, Object Oriented Programming, Database systems, Operating Systems, Software Engineering, Computer Networks.

Technical Skills

Languages: Java, Javascript, TypeScript, Python, C, HTML, CSS, SQL, ASP.Net, jQuery.
Development Tools: GIT/Github, Jira, Jenkins, GithubActions, Eclipse, Postman, KendoUI, Splunk, JSON, AJAX.
Technologies: React.js, GraphQL, Django, Nodejs, Express.js, Agile methodology, Tailwind CSS, Kubernetes, AWS, Webpack, Vite, Redis, NoSQL, RESTful API, Microservices, ELK, MongoDB, T-SQL, ECS, EC2, PostgreSQL, SDLC.

Experience

Accenture   Dec 2020 – Aug 2022
Software Engineer (Full Stack Engineer) - Javascript, React.js, Node.js, ELK, Redis, NoSQL, Kubernetes   *Bangalore, India*
- Led a team of 7 in integrating third-party live agent escalation APIs into **AI chatbot** MVP, designing optimized **RESTful APIs** with a polling mechanism to reduce delayed response time by 14%.
- Redesigned APIs to achieve a 35% reduction in response time through optimized REST protocols and improved Cassandra database performance by 40% using advanced **NoSQL** queries, validated with **Dynatrace**.
- Developed responsive **React.js** components, leveraging **Context API** for state management, Web UI components and **React hooks** (useRef) for input handling, improving user experience by 15% as measured through **Quantum Metric**
- Directed the implementation of a real-time monitoring dashboard using the **ELK stack** across five **microservices**, collaborating with engineering teams to integrate intent-specific logs and reduce incident response time by 30%.
- Optimized **chatbot performance** by implementing a **Redis**-based caching strategy to store frequently accessed query results, improving system scalability and enhancing user experience by 18%.
- Resolved a critical Severity 1 production issue causing timeouts and disrupted **chatbot-live agent connections** within 4 hours. Identified and fixed a header size error using ELK stack and Postman logs.
- Implemented Postman automation test suite and **Swagger** to validate API endpoints, ensuring reliability and secure server-client interactions and overall system stability.

Projects

Waste Classification System | *Python, OpenCV, Machine Learning*
- Designed and implemented an advanced image classification pipeline utilizing feature extraction techniques (color histograms, HOG, LBP, and shape analysis), achieving 84% accuracy in multi-class classification tasks.
- Developed and evaluated ML models (Random Forest, SVM, k-NN) using cross-validation and hyperparameter tuning, optimizing model performance and improving system robustness for real-world image datasets.

MovieSage | *Full Stack Application - React.js, Redux, Tailwind, Firebase, Vercel, OpenAI*
- Built a movie discovery feature using the TMDB API for movie data and OpenAI API for improved search results, attracting over 100 monthly users by providing smarter, more personalized movie recommendations.
- Developed a streamlined UI with React.js and Redux, increasing user retention by 10% through a simplified Firebase login process and enhancing overall app engagement.

3D Immersive Showcase | *WebGL, Three.js, React.js, Google Analytics* | [**Website**]
- Engineered a 3D interactive portfolio website using React.js and Three.js, featuring advanced Web Graphics Library rendered animations, and a feature flag for toggling the 3D opening sequence.
- Integrated Google Analytics to track button clicks and scroll events, delivering insights into user interaction patterns, analyzing user behavior to optimize the project showcases, work experience, and education sections.

Achievements

Awarded Best Employee for "Client Value Creation" 2022 at Accenture.