VIVEK VARDHAN KALYANAPU

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Profile Summary

Full Stack Developer with a strong track record in building and deploying scalable web applications, integrating both front-end and back-end development to deliver seamless user experiences. Experienced in designing robust architectures, optimizing performance, and utilizing DevOps practices to streamline deployment and improve system reliability. Skilled in leveraging AI models and tools, such as Retrieval-Augmented Generation (RAG) and machine learning frameworks, to create innovative solutions. Known for adaptability, problem-solving, and a commitment to continuous learning and technological advancement. Ready to drive impactful innovation in a dynamic team environment.

Skills

Programming Languages: Java, Python, JavaScript, TypeScript, Kotlin, SQL, HTML/CSS
Frameworks & Libraries: Next.js, AngularJS, React, Redux, Node.js, Express.js, Flask, jQuery, Spring, GraphQL
Testing & Tools: Junit, Mocha & Chai, Postman, Open API (Swagger)
Databases: Oracle, PostgreSQL, MongoDB, Firebase, Pinecone
Developer Tools: Git, Maven, Visual Studio Code, AWS, Android Studio
DevOps & Automation: CI/CD Pipelines (Jenkins, GitHub Actions) Docker, Terraform, Automated Testing (Jest, Cypress), Monitoring & Logging (AWS Cloud Watch, ELK Stack)

Professional Experience

Full Stack Developer | Regions Financial Corporation   **February 2024 – Present**

- Developed and maintained RESTful APIs using Node.js and Express.js, integrating with internal and external systems to provide real-time data access and support analytics for risk management and compliance.
- Built dynamic front-end applications with React.js and implemented state management using Redux, improving data visualization and user experience for internal web tools.
- Designed a microservices-based architecture with Node.js to improve scalability and facilitate independent deployment of services.
- Containerized applications using Docker and orchestrated them with Kubernetes for automated scaling and load balancing.
- Implemented CI/CD pipelines with Jenkins and GitHub Actions to automate testing, integration, and deployment processes.
- Utilized AWS Lambda and API Gateway for building serverless functions, reducing infrastructure costs and increasing agility.
- Conducted Test-Driven Development (TDD) with Jest and Mocha to ensure code quality and reduce production bugs, leading to more reliable software releases.
- Managed production support with Prometheus and ELK Stack, achieving 99.9% system uptime through proactive monitoring and issue resolution.
- Mentored junior developers in best practices for API development and DevOps, fostering a collaborative environment and improving overall team efficiency through code reviews and pair programming techniques.

Full Stack Developer | Connectial Infosolutions Pvt Ltd   **June 2019 – December 2022**
Client: PayPal Inc.

- Engineered and crafted dynamic, responsive webpages utilizing HTML5, CSS3, Tailwind CSS, Bootstrap, JavaScript, and React/Redux. Leveraged Webpack for module bundling and optimization, reducing page load times by up to 30% and streamlining dependency management.
- Architected and sustained reusable React.js components for data visualization, employing Highcharts for chart rendering. Orchestrated automated end-to-end testing with Cypress to validate chart functionality and user interactions, achieving 95% test coverage across the application.
- Modernized Highcharts and Node.js versions, leveraging Docker for containerization and dependency management, and employed automated performance testing with Lighthouse to elevate application performance, resulting in a 20% improvement in speed.
- Architected scalable RESTful APIs and microservices using Node.js, Express, and Docker, ensuring efficient data retrieval and enhanced security through JWT and OAuth2 integration. Managed databases with PostgreSQL and MongoDB, leveraging ORMs like Sequelize and Mongoose to streamline data operations, reducing query response times by 40%.
- Administered the company's security dashboard, resolving back-end and client-side issues through coding, maintenance, and debugging. Streamlined deployment processes by automating with Jenkins and Docker, ensuring rapid and consistent delivery of updates.
- Designed and implemented CI/CD pipelines using Jenkins, integrating automated build, test, and deployment processes to accelerate development cycles and minimize manual interventions, achieving a 30% reduction in deployment errors.
- Deployed infrastructure-as-code (IaC) tools like Terraform and Ansible to automate the provisioning and configuration of development and production environments, ensuring consistency and scalability across various deployment stages, resulting in 20% faster environment setup.
- Applied Agile design principles throughout the project lifecycle, supported by Jira for project tracking, enabling the team to complete projects ahead of schedule and improve project management efficiency by 25%.

Projects

AI-Powered Professor Recommendation System

- Built a "Rate My Professor" application using Next.js, Pinecone, AI models, RAG (Retrieval-Augmented Generation), Python, and Node.js.
- Developed a search and recommendation system that provides personalized professor recommendations based on user-submitted data, including links, ratings, and reviews.
- Researched and integrated RAG to enhance the accuracy and relevance of recommendations by retrieving context-specific data from a large dataset.
- Utilized Python and web scraping tools to automatically extract professor information, ratings, and reviews from submitted links, then preprocessed and stored the data in a vector database for efficient querying and retrieval.
- Implemented efficient backend operations and API integration to handle data scraping, storage, and query processing, leading to a responsive and intelligent user experience.

Education

UNIVERSITY OF ALABAMA, Birmingham, AL
Masters in computer science

GITAM INSTITUTE OF TECHNOLOGY, Visakhapatnam, INDIA
Bachelor of Technology, Major in Electronics, and communication