Jayanth Srihaas Karanam

Software Engineer

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Summary

- 3 years of experience as a Software Engineer, specializing in developing comprehensive web applications using Java, JavaScript, TypeScript, Python, SQL, C, and C++, ensuring robust and efficient functionality across the entire stack.
- Engineered responsive and dynamic front-end interfaces using **React.js**, **Next.js**, **and HTML5/CSS3**, with design integration through **Figma** to enhance user experience and visual appeal.
- Built and integrated a scalable back-end system using **Node.js**, enabling seamless communication between the frontend and databases for optimal performance.
- Optimized database management by implementing **MySQL** and **MongoDB**, resulting in improved data retrieval speeds and efficient storage solutions for large-scale applications.
- Deployed and maintained cloud-based services through **AWS Lambda, S3, EC2**, and **Azure**, ensuring high availability, scalability, and secure access to the application infrastructure.
- Implemented version control and collaboration using **Git** and **VS Code**, along with containerization via **Docker** to streamline development processes and enhance team productivity.
- Conducted rigorous API and service testing using tools like **Selenium**, **Postman**, and **LoadRunner**, ensuring reliability, security, and optimal performance of the web application.
- Integrated **Stripe** payment processing into the application, enabling secure and efficient handling of transactions, enhancing the overall user experience.
- Debugged and tested code using **Sanity**, ensuring that the application met high standards of quality and stability across various development stages.
- Ensured cross-platform compatibility by developing and maintaining the application across Linux, Windows, and macOS environments, supporting a wide range of user systems.

Skills

Programming Languages: Java, JavaScript, TypeScript, Python, SQL, C, C++, JSON, HTML, CSS

Front-End Technologies: React.js, Next.js, HTML5/CSS3, Figma

Back-End Technologies: Node.js

Databases: MySQL, MongoDB

Cloud Services: AWS Lambda, S3, EC2, Azure

Development Tools: Git, VS Code, Docker, Android Studio, Jupyter Notebook

Testing and Debugging: Selenium, Sanity, Postman, LoadRunner, Versal

Payment Integration: Stripe

Machine Learning Linear Regression, Logistic Regression, Classification Models, Random

Forest

Operating Systems Linux, Windows and mac-OS

Education

California State University, Dominguez Hills

May 2024

Master of Science in Computer Science (3.66/4.0)

Amrita Vishwa VidyapeethamBachelor of Technology in Computer Science Engineering (3.2/4.0)

Jun 2021

Experience

Capital One, USA
Software Engineer
Mar 2024 - Present

- Developed a customer relationship management (CRM) web application using HTML5 and CSS for a user-friendly interface and implemented React.js for dynamic page functionality, incorporating Next.js for server-side rendering and routing.
- Designed and integrated RESTful APIs using Node.js and Express, enabling features such as customer data management, task tracking, and real-time notifications.
- Managed data storage and retrieval with MongoDB, utilizing Mongoose to define schemas and ensure efficient data handling across both the back-end and front-end components.
- Enhanced user experience and application performance by optimizing JavaScript code and applying responsive design principles, achieving a 20% increase in user engagement and a 15% reduction in bounce rates.
- Improved application responsiveness with AJAX for real-time data updates, and reduced data load times by 35% and page load times by 25% through effective use of JSON and optimized data processing.

- Integrated Stripe for handling secure online payments, ensuring safe and reliable financial transactions within the application.
- Built dynamic, data-driven user interfaces with React.js and styled them with Tailwind CSS, resulting in a 40% increase in user interaction and a 30% decrease in bounce rates.
- Conducted thorough debugging and performance tuning, leading to a 20% improvement in application speed and ensuring adherence to performance benchmarks.
- Utilized Python for data extraction and analysis, enhancing CRM functionalities by integrating real-time data from various sources.
- Coordinated team efforts and version control with Git, achieving a 25% reduction in code conflicts and ensuring a smooth development process.

Cognizant, India Software Engineer

Oct 2019 - Jul 2022

- Engineered and deployed a Node.js/Express-based application server to handle complex RESTful API interactions, ensuring seamless integration with client systems.
- Designed and implemented dynamic JSON response structures for interactive front-end dashboards, significantly improving data visualization and user experience.
- Utilized React.js and Next.js to create a responsive and intuitive front-end interface, integrating with back-end services to provide real-time updates and enhanced usability.
- Developed and maintained robust databases using PostgreSQL and MongoDB, optimizing query performance and ensuring data accuracy.
- Implemented scalable cloud solutions using AWS services such as Lambda, S3, and EC2, enabling secure and efficient data processing and storage.
- Conducted thorough testing and quality assurance using Selenium, Postman, and JUnit, addressing bugs and ensuring high standards of software reliability.
- Collaborated in agile sprints, employing VS Code and Git for version control and collaborative development, enhancing team productivity and project management.
- Created detailed wireframes and prototypes with Figma, guiding the development of user-friendly interfaces and ensuring alignment with client requirements.
- Managed the deployment and integration of payment processing using Stripe, facilitating secure transactions and seamless user interactions.
- Implemented and optimized file parsing mechanisms to handle bulk data ingestion into Elasticsearch, improving data processing efficiency and system performance.

Project

Flashcards-AI | Next.js, Clerk, Firebase, GroqAI, Stripe

Aug 2024

- Developed an AI-powered flashcard generation feature named Quiz Crafter by leveraging GroqAI API, transforming keywords into dynamic, interactive flashcards, creating a fully functional SaaS platform.
- Participated in agile sprints, using VS Code, Docker, and Git for collaborative development and version control, enhancing project efficiency.
- Implemented secure user authentication for 1000+ users using Clerk, enhancing user on-boarding efficiency by 25%
- Integrated Firebase to handle real-time data for over 10,000 flashcards, boosting app responsiveness by 30% and deployed a monetization system using Stripe

Web Scapper | HTML, CSS, JavaScript, Node.js, Express.js, MongoDB, Puppeteer

Jul 2024

- Developed a full-stack application that scrapes web data and simulates browser-like interactions using Puppeteer.
- Integrated a Node.js backend with Express.js, enabling user-driven actions like button clicks and form submissions
- Utilized MongoDB to store and manage over 10,000 data entries, ensuring fast retrieval with a 25% increase in data Processing speed.

ECommerce React Application | ReactJS, NextJS, JavaScript, Sanity, Stripe, SQL

Mar 2024

- Developed and deployed a fully responsive e-commerce website using Reacts Context API and Stripe for seamless Payment processing.
- Leveraged Next.js for advanced data fetching techniques, enabling server-side rendering and static generation for optimized website performance.
- Utilized Sanity CMS for dynamic content management, ensuring seamless updates and site maintenance.

Certificate

- Azure Fundamentals
- Azure Administrator Associate
- Edureka Full Stack Web Development