

RAKESH RAVULA

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Front-End Development: Proficient in React.js, Next.js, and Redux for building responsive and dynamic user interfaces, with expertise in React Hooks for efficient state management.

Back-End Development: Skilled in Node.js and Express.js to create robust server-side applications, implement RESTful APIs, and handle server-side logic.

Database Management: Experienced in working with various databases, including MySQL, PostgreSQL, and NoSQL databases, for efficient data storage and retrieval.

AWS Expertise: Hands-on experience with AWS services, including EC2, Lambda, S3, RDS, VPC, IAM, and CloudWatch, for scalable and reliable cloud-based solutions.

Continuous Integration/Continuous Deployment (CI/CD): Proficient in setting up CI/CD pipelines using tools like Jenkins and Git, ensuring efficient and reliable application delivery.

Web Technologies: Skilled in JavaScript, TypeScript, HTML5, CSS3, SCSS, and jQuery for crafting modern and visually appealing web applications.

User-Centered Design: A passion for creating user-friendly interfaces and implementing user-centered design principles to enhance the overall user experience.

Security: Knowledge of security practices, including OAuth, JWT, and OWASP top 10 techniques, to fortify applications against vulnerabilities.

Version Control: Proficient in versioning tools like Git and TFS for effective code collaboration and management.

Problem Solving: Strong problem-solving skills demonstrated in complex data transformation, anchor link management, and graph traversal techniques.

CI/CD Tools: Proficient in Jenkins for setting up continuous integration and continuous deployment pipelines to ensure efficient and dependable application delivery.

Blockchain and IoT: Familiarity with Blockchain, Solidity, Dapps, IOT, Embedded C, and Arduino UNO, enabling innovative solutions in emerging technologies.

Portfolio and GitHub: Maintained a portfolio of projects and contributed to open-source development on GitHub, showcasing a strong commitment to ongoing learning and collaboration.

Technical Skills

JavaScript	TypeScript	Node.js	ReactJS	Redux	Vue.js	React Hooks		
HTML5	CSS3	SCSS	NextJS	GraphQL	Axios	Material UI		
jQuery	Ajax	Webpack	Git	CI/CD	Jenkins	Git	AWS	MySQL
PostgreSQL	MongoDB	Blockchain	Solidity	Dapps	IOT	Embedded C	Arduino	

Professional Experience

Full Stack Developer - UAB School of Health Professions

May 2022 - April 2023

- Contributed to innovative **web development** for personalized health advice, integrating user-centered features aligned with targeted health objectives.
- Implemented **Agile Scrum** methodologies and continuous enhancement of application quality and performance through rigorous testing, monitoring, and maintenance.
- Integrated **Twilio Flex** module as a plugin to streamline the daily call survey process, enhancing user communication.
- Created a user-friendly feature using **ASK** (Alexa Skills Kit) that allows users to conveniently log their food intake using an Alexa device.
- Orchestrated the deployment and hosting of applications within Docker containers on **AWS**, optimizing deployment procedures.
- Employed **CI/CD** tools such as Jenkins and Git to establish a robust and streamlined CI/CD pipeline, ensuring efficient and dependable application delivery.
- Implemented RESTful services to facilitate seamless communication and utilized jQuery for efficient DOM manipulation.
- Led the adoption of Test-Driven Development (**TDD**) practices, achieving a substantial 90% test coverage milestone using Jest.
- Enhanced application security with **OAuth** and **JWT**, employing OWASP top 10 techniques to fortify code against vulnerabilities.
- Implemented **CMS** to streamline and enhance content management processes, boosting efficiency and organization within the project.

Full Stack Developer - ValueLabs, Hyderabad, India

May 2019 – Dec 2021

Pearson - eBook

- Contributed significantly to the Bronte courseware project at Pearson, converting complex **XHTML** content from **.epub** files into meticulously structured **JSON** elements with 100% accuracy.
- Employed **web scraping tools**, including **Cheerio**, in conjunction with custom algorithms on the **Node.js** platform to achieve accurate data transformation.
- Successfully executed a pivotal **Proof of Concept** (PoC) within the project, focusing on effectively managing anchor reference links in JSON elements.
- Conducted an additional impactful PoC by extensively researching **OOXML** tags, strategically implementing parsing methodologies, and generating equivalent JSON output.
- Applied **graph traversal** techniques to efficiently navigate complex course files, ensuring accurate extraction and parsing of individual elements.
- Utilized **GraphQL API** programming in conjunction with Node.js features like streams and asynchronous processing to efficiently handle and manipulate extensive **XML**-based data structures.
- Utilized **AWS Lambda**, **S3**, **ECS**, and **ECR** to store JSON output objects, seamlessly transferring data to another module via **Lambda**, **SNS**, and **SQS** for efficient communication.
- Demonstrated strong **problem-solving** skills by understanding of **data structure** intricacies.

Astro-ARP Digital Ads Platform

- Developed a full-stack application as a key component of the ARP Digital platform for Astro clients, enabling users to seamlessly register and pay for ad placements across diverse platforms.
- Created an intuitive user interface using React **Bootstrap**, offering users the ability to select ad types, specify display frequencies, and receive instant price estimates.
- Utilized **Node.js** for the backend, integrating with **SQL** as the database technology to ensure efficient data storage and retrieval for user transactions.
- Orchestrated the deployment of the entire application on an **AWS server**, ensuring reliable hosting and optimal performance.
- Spearheaded the enhancement of application efficiency by implementing interactive dashboards within the frontend using **Material UI**, providing users with insightful metrics and controls.
- Developed and integrated **REST APIs** to facilitate seamless communication between the frontend and backend, enabling data exchange and user interaction.
- Employed **PL/SQL** to streamline database operations, enhancing data integrity and retrieval speed for various application functionalities.
- Pioneered the implementation of a dynamic feature that adjusted component and **data loading based on network speed**, contributing to a smoother user experience.

Education

Master of Science in Computer Science | [UAB] | [Birmingham] | [2023] - 3.8

Bachelor of Technology in Computer Science | [Lbrce] | [Vijayawada] | [2019] - 3.5

Work Samples

Dog Finder (React, TypeScript, Next.js) - (<https://github.com/rravula22/findogy>)

(<https://findogy.vercel.app/>)

Technologies: React, TypeScript, Next.js

Description: Created an Ultimate Dog Matching App with advanced filtering options for breed, location, and age, providing users with a seamless experience in finding their ideal canine companions.

Profile Website with Headless CMS from Sanity: (https://github.com/rravula22/personal_website)

(<https://rakeshravula.me/>)

Technologies: React, Next.js, TypeScript, Sanity (Headless CMS)

Description: Developed a personal website integrated with a Headless CMS from Sanity, enhancing content management efficiency and allowing for seamless updates, all while providing an improved user experience.