**MADHU KIRAN PATHURI**

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**REACT DEVELOPER | NODE DEVELOPER |MERN STACK DEVELOPER**

* Accumulated over **10+ years** of extensive experience as a FrontEnd UI Developer. Over **7** years of experience as a **Mern- Stack Developer** in various domains like **Health Care, Retail, E-commerce.**
* **Expertised** in design and development of web and enterprie applications using **React, Redux, Angular, Javascript, jQuery, Ajax, CSS3,**

**LESS/SASS, Material UI, Tailwind . HTML5.**

* Vast Experience and Strong Knowledge in building Mern Stack Web Applications using (**Node.js, Express.Js, MongoDB, React.js**)
* Orchestrated the development of intuitive and high-performance user interfaces for major clients like Kroger and Best Buy, elevating their digital shopping experiences.
* Embraced a comprehensive understanding of React core concepts like **states, props, store, action, creator, reducer.**
* Experience in using **Redux** to manage the application state and applying middleware such as **redux-promise,** **redux-thunk** and **redux-saga**
* In depth understanding of Node.js Concepts like Event-Driven Architecture, Non-Blocking I/O, Single Threaded Event Loop,npm.
* Demonstrated mastery in crafting single-page applications **(SPAs)** using **React Js and** responsive User Interfaces for Mobile/Tablet/Desktop using **CSS3, Material UI, Tailwind CSS.**
* Mastered in writing server-side code with **Node.js** and Express framework.
* Experience in implementing usage of Node.js and NPM, especially for Node build processes like **GRUNT** and **GULP.**
* Proficient in creating REST APIs with Javascript frameworks like **Express.js**, **Node.js** as a Middleware and databae modelling tool like **Mongoose** and databases like **MongoDB**.
* Proficiently navigated a wide array of web technologies, including HTML5, CSS3, XML, JavaScript, React JS, JQuery, JSON, Node.js, Ajax, Redux, Flex, SASS, LESS, JQUERY Bootstrap, and AWS.
* Demonstrated mastery in crafting single-page applications (SPAs) using React Js and
* Cemented a solid grasp of web protocols and standards such as HTTP, HTML5/XHTML/XHTML-MP, CSS3, Web Forms, and XML.
* Tailored CSS frameworks like Bootstrap and Foundation with CSS pre-processors **LESS/ SASS** and CSS libraries like **Material UI**, **Tailwind CSS.**
* Delved deeply into the Document Object Model (**DOM)**, DOM Functions, JavaScript functions, and cross-browser cascading styles.
* Applied **React JS** fluently, leveraging Flux architecture, and honed expertise with Redux architecture for performance optimization.
* Demonstrated adeptness in React JS comperonents**, Forms, Events, Keys, Router, Redux, Animations**, the Flux concept, and the creation of a Custom Reusable React Components Library.
* Leveraged version control tools like CVS, **GIT**, SVN, Clear-Case, and continuous integration tools like Jenkins and Maven.
* Collaborated closely with UI/UX designers to create visually appealing and user-friendly interfaces using **React.js**, enhancing the overall user experience.
* Embraced a comprehensive understanding of the Software Development Life Cycle (SDLC), including Requirement Analysis, Implementation, and Maintenance with **Agile** and SCRUM methodologies.
* Established deployment pipelines, continuous integration/continuous deployment (**CI/CD**) workflows, and monitoring systems to efficiently deploy and manage MERN stack applications.
* Experience in **AWS** Cloud services such as EC2, Lamda Expression, Cloud Watch, S3,SNS,SQS, Dynamodb.
* Demonstrated prowess in thriving both as a team member and autonomously.
* Distinguished as a highly skilled and results-driven React.JS developer with over 10 years of experience in designing, developing, and maintaining complex web applications.
* Produced technical documentation, API documentation, and code comments to facilitate collaboration among team members and ensure the maintainability of the codebase.
* Participated actively in code reviews, contributing to code quality assurance efforts and fostering a culture of continuous improvement.
* Aspire to undertake a challenging role as a MERN stack developer, leveraging expertise in web development technologies to craft clean, efficient, and maintainable code for both front-end and back-end components of web applications.

# TECHNICAL SKILLS

**Web Technologies:** HTML5, CSS3, SASS, JavaScript, AJAX, jQuery, WordPress, JSON, Bootstrap, Angular, React JS, NodeJS, Redux , ES6, Express JS, Node.js, GitHub

**Development Tools:** Visual Studio Code,Eclipse, Web Matrix, Web Strom, Sublime Dreamweaver, Notepad++

**Debugging Tools:** Firebug, Bugzilla, Chrome Developer Tools, Intel IJ

**Frameworks & Libraries:** Next.js, Express.js, React, Redux, jQuery, JSON, Jquery.

**Servers:** Apache Tomcat, , JBoss, HTTP Web Server, IBM WebSphere,

**Platforms:** Windows , Mac, Linuix

**Methodologies:** Agile, Rational Unified Process (RUP), UML Waterfall

**Database:** MongoDB, PostgreSQL, SQL Server

**Front End Tools**: Adobe Photoshop ,Figma

**Testing Tools and Logging Frameworks:** Jest,Enzyme,mochaLoad runner, Jasmine, Selenium, T-probe, Easy Mock

**Programming Languages:** C, C++, JAVA, C#, .Net, ASP.Net, Web Services

**Cloud:** AWS, Azure, Devops, Docker.

**Others:** GraphQl, Redis, OAuth.

# CAREER PROGRESSION

**Sr React & Node Developer (MERN STACK) | Kroger, Cincinnati, OH April 2021 – Present**

**Project Description:**

Developed responsive and dynamic to streamline Kroger’s online ordering and delivery system, enhancing user satisfaction by providing real-time order tracking, seamless payment integration. This Led the transformation of millions of customers' digital shopping experiences for Kroger by crafting intuitive and visually appealing user interfaces for its website and mobile apps. Collaborated with cross-functional teams to align design solutions with customer needs and company objectives, enhancing navigation, functionality, and user satisfaction.

**Responsibilities:**

* Employed React JS components, Forms, Events, Keys, Router, Animations, and the Flux concept to create dynamic and responsive UIs.
* Engineered stable React components and standalone functions for seamless integration across web pages.
* Implemented Redux for state management in complex applications, ensuring data consistency and efficient UI updates.
* Spearheaded the development and maintenance of scalable and high-performance user interfaces for Kroger's web applications using React.js.
* Utilized WebSocket for real-time geo-location updates on Google Maps.
* Crafted client-side interfaces with React JS, supported by Node.js and MongoDB on the backend.
* Established communication with backend APIs using Node.js for dynamic content population.
* Integrated MongoDB and PostgreSQL with Node.js applications, implementing CRUD operations and optimizing data retrieval.
* Orchestrated login, authorization, logging, error handling, and other aspects across the application using Node.js.
* Utilized Node.js for SSR, enhancing performance and SEO for the Kroger web app.
* Conducted code reviews in Node.js projects to enforce TDD principles and maintain high testing standards.
* Created end-to-end tests for Node.js applications using frameworks such as Selenium, Cypress, to validate application functionality.
* Utilized ES6 arrow functions for concise syntax and lexical this binding.
* Applied ES6 spread and rest operators for array and object manipulation.
* Managed application state efficiently using Redux, MobX, or React Context API in React Native applications.
* Implemented server-side rendering (SSR), static site generation (SSG), routing, and API integration using Next.js and React.
* Created backend using ExpressJS and included NPM package Axios to get results from multiple search APIs.
* Integrated server-side routing with Express.js for effective HTTP request management.
* Implemented secure authentication mechanisms (JWT, OAuth) and conducted security assessments to prevent SQL injection, XSS, and CSRF, ensuring robust application security.
* Integrated GraphQL schema and queries to accurately retrieve data and depict the Kroger online application's structure.
* Integrated SOAP web services to enhance backend connectivity.
* Hosted the Kroger online application on Amazon Web Services (AWS), leveraging Amazon EC2 and AWS Elastic Beanstalk for deployment.
* Containerized components of the Kroger online app using Docker and integrated Docker into the CI/CD pipeline for automation.
* Utilized Kubernetes Services to streamline communication between frontend and backend services.
* Implemented MongoDB as the primary database for managing unstructured or semi-structured data.
* Configured build tools like Babel, Webpack, Parcel, and Vite to optimize assets for production deployment.
* Implemented SOAP client functionality within the front-end codebase using JavaScript-compatible libraries.
* Configured Webpack, Parcel, and Vite as the build tools to bundle and optimize the Kroger web app&#39;s assets, including JavaScript, CSS, images, and fonts, for production deployment.
* Designed and implemented serverless architectures using AWS Lambda, SQS, and SNS services.
* Written AWS Lambda functions in TypeScript to handle various application logic and event-driven processes.
* Utilized Jest as the primary testing framework for unit tests and Enzyme for React component rendering.
* Consumed RESTful APIs to manipulate data within React applications.
* Implemented the Flux architecture pattern to manage data flow in the Kroger web app.
* Provided actionable insights based on A/B test outcomes to optimize website performance.
* Led the design and implementation of a microservices architecture that improved system scalability and reduced deployment times by 50%.

**Environment:** Node.js, React.js, Express.js, MongoDB, Redux, Next.js, GraphQL,HTML5, CSS3, Bootstrap, SASS, JavaScript, jQuery, JSON.

**Sr React & Node Developer (MERN STACK) | Best Buy, Richfield, MN June 2019 March 2021**

**Project Description:** As a MERN Stack Developer at Bestbuy, I played a pivotal role in developing and maintaining the company's online shopping platform. This project involved creating a highly responsive and user-friendly interface using React.js, coupled with a robust backend built with Node.js and Express.js. I was responsible for designing and implementing key features, such as user authentication, product listings, and shopping cart functionalities.

**Responsibilities:**

* Designed and implemented modular React components to bolster code reusability and maintainability across projects, streamlining development processes and ensuring consistency.
* Employed React.js state and props mechanisms effectively to manage component data flow, guaranteeing accurate rendering and seamless interaction within the application.
* Utilized React.js capabilities to craft responsive and visually appealing user interfaces adaptable to various screen sizes and devices, enhancing accessibility and user experience.
* Implemented React Router to establish dynamic client-side routing, facilitating smooth navigation between different views and pages within the application, thus improving user engagement and usability.
* Leveraged React.js virtual DOM to optimize rendering performance, reducing DOM manipulations and enhancing overall application speed and responsiveness.
* Integrated geospatial data visualization features within the React.js application, including map rendering, layer display, and style customization.
* Retrieved geospatial data from GeoServer's REST API or other sources and integrated it seamlessly into the React.js application.
* Employed Redux for centralized state management in complex applications, ensuring predictable state changes and simplified data flow between components, thereby enhancing code maintainability and scalability.
* Oversaw the deployment of React Native applications to app stores (Google Play Store, Apple App Store) and managed the app release process.
* Optimized React Native applications for enhanced performance, focusing on reducing bundle size, improving rendering speed, and minimizing memory usage.
* Used Node mailer package in NodeJS to send email using send Mail method.
* Applied performance profiling techniques to optimize Node.js code and improve application response times.
* Implemented caching strategies and optimized database queries in Node.js applications to enhance overall performance.
* Developed server side of RESTAPI’s using Node.JS with Express.JS framework.
* Designed, developed, and tested HTML5, CSS3, Bootstrap, JavaScript, jQuery, and React.JS applications, ensuring compliance with accessibility and web browser standards.
* Managed front-end dependencies using Node.js-based package managers such as npm or Yarn, ensuring consistency and version control of third-party libraries used in the project.
* Integrated Node.js-based testing frameworks such as Mocha, Jest, or Cypress for designing and executing automated unit tests, ensuring the reliability and stability of the web app's front-end components.
* Implemented Node.js-based CI/CD pipelines with tools such as Jenkins, Travis CI, and GitLab CI/CD, automating build, testing, and deployment procedures for faster release cycles and improved deployment workflows.
* Created RESTful APIs with Express.js to interface with backend services and databases, serving static files (including HTML, CSS, JavaScript, and pictures).
* Utilized GraphQL with backend services and databases like PostgreSQL and SQL to establish a unified API for the Kroger web app.
* Deployed Kroger using Azure App Service, automating construction, testing, and deployment with Azure Devops CI/CD pipelines, and managing relational data in Azure SQL Database.
* Implemented Agile approaches such as Scrum or Kanban into Jira, supporting iterative development cycles, sprint planning, daily stand-ups, and sprint reviews to ensure timely delivery of features and enhancements.
* Utilized Jenkins to execute automated tests during construction and incorporated unit, integration, and end-to-end testing to assure web app quality before release.
* Embedded images and multimedia content using HTML5 tags and employed CSS3 animations and transitions to enhance interactivity and user experience.
* Employed JavaScript event listeners to buttons or input fields to perform actions such as form submission, UI updating, or data fetching from the server.
* Leveraged TypeScript for frontend development, including building web applications and components within larger applications using frameworks like Angular and React.js.
* Collaborated with the Backend team to display data using custom components, library components, and Redux, optimizing API calls and integrating RESTful services.
* Integrated web services (SOAP and RESTful) for efficient data transmission, potentially leveraging Node.js, MongoDB, and Express.js for backend API development and management.
* Utilized Git for version control and implemented data access layers using ADO.NET for database interactions.
* Created and executed SQL Server stored procedures using ADO.NET, tracked and managed bugs/issues using JIRA, and wrote unit tests using the Jasmine framework.
* Conducted thorough manual testing to identify bugs and ensure functionality using JIRA, Bugzilla, Trello
* Designed A/B test scenarios to compare different versions of web pages or features using tools Google Analytics, Optimizely, Adobe Target
* Conducted unit tests or integration tests for TypeScript code using testing frameworks like Jest, Jasmine, or Mocha.

**Environment:** Node.js, React.js, Express.js, MongoDB, Redux, Next.js, GraphQL,HTML5, CSS3, Bootstrap, SASS, JavaScript, jQuery, JSON.

**Sr React & Node Developer (MERN STACK) | Yahoo, Sunnyvale, CA January 2017 - May 2019**

**Project Description:** Contributed to a project aimed at enhancing user engagement and improving the user experience on Yahoo's homepage, a gateway to the internet for millions of users. Focused on creating a more personalized and interactive experience to keep users engaged and returning.

* Implemented React JS Virtual DOM and developed React views and components, including the utilization of custom HTML tags for complex UIs.
* Created various screens for the frontend with React.js, leveraging predefined components from NPM and the Redux library for a modular and scalable architecture.
* Researched and evaluated JavaScript-based frameworks like React Native and Ionic/Cordova for frontend development to determine the most suitable tools for project requirements.
* Configured Node.js to serve static assets such as images, fonts, and client-side JavaScript files, optimizing load times and enhancing caching strategies for improved performance.
* Developed and deployed Micro Services based application using Node.js with Express.js.
* Implemented modules into Node JS to integrate with designs and requirements.
* Used Node.js to run Grunt tasks and build properly the project.
* Integrated GraphQL with backend services and databases to establish a unified API for the Kroger web app, enhancing data retrieval efficiency and scalability.
* Implemented SOAP authentication mechanisms, such as WS-Security, to ensure secure communication between the frontend application and SOAP-based services, safeguarding sensitive data.
* Configured Webpack to execute a variety of build tasks such as linting, minification, preprocessing, testing, and transpiling based on the build target, improving development workflow efficiency.
* Demonstrated expertise in TypeScript, including the ability to write type-safe code, utilize advanced features like generics and decorators, and leverage TypeScript's static typing to detect errors early in the development process.
* Employed the Flux pattern using the Redux framework for predictable state management, ensuring consistent application behavior.
* Integrated PostgreSQL and SQL Server databases into the Kroger web app to manage structured data such as user accounts, transactions, and inventory information effectively.
* Maintained AWS infrastructure components such as EC2, RDS, SQS, and Lambda, ensuring scalability and reliability of the cloud infrastructure.
* used AWS CDK to define cloud infrastructure as code (IaC) using TypeScript constructs.
* Hands-on experience in provisioning and managing AWS resources such as Lambda functions, SQS queues, and SNS topics using CDK.
* Conducted integration tests with Enzyme, Cypress, and Karma to validate interactions between React components, Redux stores, and external services, ensuring smooth data flow and UI behavior.
* Integrated testing frameworks like Jest, Mocha, and Cypress into CI/CD pipelines using tools like Jenkins, Travis CI, or GitLab CI/CD, automating the testing process and ensuring code quality and stability with every commit.
* Built pipelines using Grunt or Gulp to streamline the development process, ensuring consistent and efficient builds across different environments.
* Developed and deployed over 20 microservices using Docker, ensuring seamless integration and communication through RESTful APIs.
* Regularly communicated updates to the business team and project managers via an Agile (Scrum) development team, ensuring transparency and continuous progress.

**Environment:** Node.js, React.js, Express.js, MongoDB, Redux, Next.js, GraphQL,HTML5, CSS3, Bootstrap, SASS, JavaScript, jQuery, JSON.

**Frontend Developer | Reliance Industries Limited, Mumbai, India April 2014 - August 2016**

**Project Description:** Contributed to the development of an advertisement management platform aimed at enabling businesses to efficiently manage their advertising campaigns. The platform provided user-friendly interfaces for creating, monitoring, and optimizing ad campaigns across various digital channels.

* Engaged in direct communication with clients to comprehend website requirements, contributing to project planning and the creation of Project Design and Plan Documents.
* Employed JavaScript to access DOM elements, modify their attributes and content, and respond to user events such as clicks and keypresses.
* Utilized JavaScript for event handling, defining functions triggered in response to specific user actions or browser events.
* Implemented animations on web pages using jQuery, creating smooth animations using predefined methods and building custom animation methods for complex effects.
* Employed Angular's component-based architecture to decompose the Kroger web app into reusable and manageable components, enhancing development efficiency.
* Leveraged Angular's two-way data binding feature to ensure seamless synchronization between the model and the view, facilitating real-time updates and a responsive user interface.
* Utilized Angular directives such as ngIf, ngFor, and Ng Switch to dynamically manipulate the DOM based on data conditions, enhancing interactivity and flexibility.
* Implemented state management techniques within Angular, such as RxJS observables or NgRx, to manage complex application states and data flow consistently and efficiently.
* Generated JSON responses from server-side applications using frameworks like Express.js in Node.js.
* Managed error handling and gracefully handled errors occurring during AJAX requests, such as network errors, server-side errors, or timeouts.
* Serialized and deserialized objects to and from XML format, commonly used in data exchange between applications.
* Developed strongly typed TypeScript reusable components and services to consume REST APIs using a component-based approach.
* Demonstrated expertise in utilizing Bootstrap's grid system to create flexible and responsive layouts for web pages, enabling precise placement of elements.
* Optimized performance by implementing techniques such as code splitting, lazy loading, and memorization to ensure smooth user interactions in Material UI-based applications.
* Implemented dark mode in projects, leveraging Tailwind CSS to create styles that seamlessly switch between light and dark themes.
* Contributed to better structure and accessibility of web pages by understanding semantic HTML5 elements.
* Created forms using HTML, including various input types, form validation, and techniques for improving user experience.
* Developed unit and integration tests for microservices, ensuring high code quality and reliability.
* Developed websites with CSS3 that adapt and respond to different screen sizes using media queries.

**Environment:** HTML5, CSS3, Bootstrap, SASS, LESS JavaScript, jQuery, JSON, Angular Js.

**Frontend Developer | Cipla Limited, Mumbai, India July 2013 - March 2014**

* Designed and developed user interaction screens based on client requirements using HTML, CSS, JavaScript, jQuery, AJAX, and JSON, ensuring efficient and responsive design.
* Implemented dynamic and interactive user interfaces using JavaScript to enhance user engagement.
* Developed JavaScript code to manage various aspects of user interaction and data manipulation directly within the web browser.
* Leveraged JavaScript to dynamically interact with and manipulate items on the webpage, ensuring seamless user experience.
* Efficiently manipulated HTML elements using jQuery selectors and methods to update HTML content, attributes, and CSS styles dynamically.
* Parsed JSON data from APIs and serialized data into JSON format as required, demonstrating proficiency in handling JSON data for data exchange in RESTful architecture.
* Interacted with RESTful APIs and effectively handled JSON data for seamless data exchange between clients and servers.
* Sent HTTP requests (GET, POST, PUT, DELETE) asynchronously using AJAX to enable seamless communication between the client and server.
* Created XML HTTP Request objects in JavaScript to interact with servers asynchronously, handling various XHR events such as onreadystatechange, onload, onerror, etc.
* Demonstrated the ability to read and extract data from XML documents using parsers like SAX (Simple API for XML) or DOM (Document Object Model).
* Created and validated XML documents against predefined schema structures using XSD, ensuring data integrity and compliance with standards.
* Showcased proficiency in TypeScript's advanced type features such as mapped types, conditional types, type guards, and key of operator, enabling the leverage of TypeScript's powerful type system to solve complex problems.
* Utilized TypeScript within various ecosystems to build scalable and maintainable web applications.
* Developed responsive websites using Bootstrap, ensuring optimal viewing and interaction across various devices and screen sizes.
* Customized Bootstrap themes and components to match specific design requirements and branding guidelines, enhancing visual appeal and consistency.
* Wrote SASS code using its enhanced syntax, including variables, nesting, mixins, and functions, for efficient CSS styling.
* Worked with SCSS (Sassy CSS) to develop custom components fully compatible with CSS syntax, ensuring code modularity and maintainability.
* Created custom components using Material UI's pre-built components and tailored bespoke components to project requirements, enhancing UI flexibility and functionality.
* Integrated Material UI with other React libraries and tools such as React Router, Redux, and Axios, ensuring seamless integration and efficient state management.
* Styled custom components using Tailwind CSS classes to create responsive navigation bars, cards, or buttons, leveraging Tailwind's utility classes for rapid development.
* Demonstrated expertise in building responsive web designs with Tailwind CSS, utilizing its responsive design utilities to create layouts adaptable to different screen sizes.
* Created interactive prototypes using Adobe XD, showcasing clickable prototypes to demonstrate user flows and interactions within applications.
* Proficient in creating wireframes and high-fidelity mockups using Adobe XD, translating ideas and concepts into visual designs aligning with project requirements.

# EDUCATION

**Bachelors in Computer Science 2009 - 2013**

Lovely Professional University