# MADHU SUDHAN REDDY AILENI

# Software Development Engineer

Sunnyvale, CA | +1-5137647856 | madhusudhanaileni@gmail.com | LinkedIn | Portfolio

### **EDUCATION**

Master of Science in Information Technology, University of Cincinnati • US, OH, Cincinnati • 4.0

Apr 2024

Bachelor of Technology in Computer Science, Malaviya National Institute of Technology • IND, RJ, Jaipur • 3.9

Apr 2020

#### **TECHNICAL SKILLS**

**Programming Languages:** Java, JavaScript, C++, C#, Apex, HTML, CSS, XML, TypeScript, Python, SQL, LWC, Scala, Shell Scripting, Bash, HTML, CSS, XML, Ajax, jQuery, Data Structures and Algorithms.

**Technologies & Tools:** React JS, Node JS, Git, MySQL, Oracle, Microsoft SQL Server, MongoDB, Firebase, Salesforce, Jira, Confluence, Docker, REST, GitHub, Heroku, Postman, Azure DevOps.

### PROFESSIONAL EXPERIENCE

#### ITS Production Assistant - University of Cincinnati, Ohio, USA

Jan 2023 - Present

- Implemented Agile Methodology in application development, incorporating iterative development, weekly sprints, and standup meetings for efficient progress tracking.
- Leveraged the advanced features of React to craft visually stunning and user-friendly web designs, resulting in a 30% improvement in user engagement metrics.
- Designed and developed multiple application pages using front-end technologies such as HTML5, CSS3, and JSON.
- Implemented a Responsive Web Design approach to the site, resulting in a 40% increase in mobile user satisfaction and a 20% decrease in bounce rates.
- Utilized JIRA for accurate bug tracking, resolving the issues and ensuring a 95% bug-free application release.

## Software Development Engineer II - IBM

Jan 2022 - Dec 2022

- Designed web-based user interaction screens and highly responsive UI components using React version 16.8, resulting in improved user satisfaction and engagement metrics.
- Demonstrated proficiency in developing Single Page Applications (SPA) utilizing JavaScript MVC frameworks, particularly ReactJS, contributing to a 20% increase in application performance.
- Implemented modular architecture using React as a view engine, facilitating the development of scalable and maintainable component-based applications.
- Established and managed a Custom Reusable React Components Library, resulting in a 30% decrease in development efforts for similar features across multiple projects.
- Applied advanced techniques in React JS components, including Forms, Events, Keys, Router, Redux architecture, and Hooks, leveraging complex Object-Oriented concepts to optimize website performance and user experience.
- Implemented Redux middleware such as redux-promise, redux-thunk, and redux-saga to handle asynchronous actions seamlessly, improving application stability and reliability.
- Developed comprehensive unit test cases using JEST to validate functionalities, resulting in a 95% test coverage and enhanced overall application quality.

## **Software Development Engineer - IBM**

May 2020 - Dec 2021

- Designed, developed, and rigorously tested HTML5, CSS3, Bootstrap, JavaScript, ES6, jQuery, and React JS components
  adhering to accessibility and web browser standards, ensuring seamless website performance.
- Managed parent and child elements seamlessly by utilizing State and Props within React.js, ensuring effective component communication and data flow.
- Implemented React and Functional Driven JavaScript across Single Page Applications (SPAs), UI Components, and mobile and web interfaces, focusing on performance optimization.
- Created various front-end screens using React.js and leveraged predefined components from NPM (Node Package Manager), enhancing development efficiency and consistency.
- Achieved significant code optimization by implementing lazy loading and modularizing components such as Login and Validation, Pagination, Upload functionality, and Refresh modules, resulting in a 30% performance boost.
- Demonstrated proficiency in leading frameworks like React.js to deliver high-quality, scalable, and reusable components for front-end solutions and worked with cross-functional teams for better result.
- Utilized JIRA for careful issue tracking and Confluence for creating and sharing comprehensive documentation, ensuring smooth project workflows and knowledge sharing.
- Implemented React container and presentational components, leveraging Stateless and Functional components when applicable, to ensure a clear separation of concerns.