

Bhavana Maramreddy Buchannagari

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TECHNICAL SKILLS

Technologies: JavaScript, TypeScript, ReactJS, Redux, HTML, CSS, Python, PHP, SQL
Tools: Git, Jest, Figma, Jira, Webpack
Platforms: Bitbucket, Google Analytics 4, Google Tag Manager, VS Code, Eclipse, Visual Studio
Certifications: [Certified SAE 5 Practitioner](#)

EXPERIENCE

Frontend Developer

USDA-NRCS Projects (GRAS,FOTG) | Spatial Front, Inc, Virginia, USA | June 2021 – Present

Currently contributing to **USDA's Grazing Resource Analysis System (GRAS)**, an internal application supporting grazing management, forage planning, and resource analysis.

- Enhancing features related to forage supply, animal demand calculations, and land unit inventory management.
- Developed complex form components and reporting interfaces using **React with TypeScript**, MobX, and shared ViewModel architecture.
- Implemented real-time validation, unit conversion logic, and configurable measurement preferences based on user roles and context.
- Refactored critical components for performance and maintainability while ensuring strict type safety with **TypeScript**.
- Supporting reporting and print modules by integrating domain-specific logic with reusable, strongly-typed UI elements.
- Developed and maintained unit tests using **Jest** and **React Testing Library** for high test coverage and quality assurance.

Worked on **USDA's Field Office Technical Guide (FOTG)**, a public-facing conservation practice document repository, enhancing and adding new UI features through continuous integration and development using the Scaled Agile framework.

- Delivering 15 feature level enhancements to date through continued integration and development with Scaled Agile development lifecycle. These include:
 - Converted the legacy Foundation CSS to a custom Bootstrap based framework. Updated overall design of the application and improved the accessibility features.
 - Designed and implemented a feature allowing users to seamlessly switch between old and new components, facilitating smooth transition for users to adapt to the new features.
 - Created and implemented highly sought after features like multi-document upload and download, providing significant benefits to users in terms of time savings and increased efficiency. Led the development of these features, including designing the user interface, implementing the necessary code and thorough testing for optimal performance.
- Integrated application with Google Analytics and Google Tag Manager to track user activity across the application, allowing for detailed analysis of user behavior and preference.
- Performing unit testing using Jest and React Testing Library.
- Worked on refactoring the code base, changed the React class components to modular functional components with custom hooks and state management.

Frontend Developer

Virtusa Corporation, Hyderabad, India

June 2015 – April 2018

- Built single-page applications using React, AngularJS, HTML, CSS, and JavaScript.
- Contributed to a logistics management app that enabled shipment tracking by third-party vendors—expanding business to new geographies.
- Translated UX wireframes into interactive, responsive features.
- Integrated services using **RESTful APIs** to support full web application functionality.
- Maintained DRY codebase and consistent user interface with reusable React components.
- Achieved ~70% unit test coverage using Jest and Enzyme.

EDUCATION

Master of Computer Science, GPA - 3.75

The University of Texas at Arlington, Arlington, TX

May 2021

Bachelor of Technology, Computer Science, GPA – 8.05

GITAM University, Hyderabad, India

May 2015