SARANYA RAVELLA

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Summary

Software Engineer with 3+ years of production experience building scalable, high-performance React applications in financial services. Proven track record delivering enterprise-grade SPAs with React/TypeScript, comprehensive testing strategies, and performance optimization. Strong foundation in software delivery lifecycle (SDLC), Agile development, Test Driven Development (TDD), CI/CD pipelines, and RESTful API architecture. Experienced in technical troubleshooting, architecture standards, and heterogeneous technology environments.

Skills

- **Programming Languages**: JavaScript (ES6+), TypeScript, Java, Python, SQL
- **Frontend Technologies**: React (Hooks, Redux, Router, JSX, Virtual DOM), Bootstrap, CSS/SCSS, Sass, Less
- **Backend & Integration**: Node.js, RESTful APIs, GraphQL, Spring Boot, Microservices, REST, SOAP, SPEL
- **Database Management**: MySQL, SQL Server, Oracle, MongoDB
- **Version Control**: Git, GitHub, Gitlab
- **Cloud & DevOps**: AWS, Azure, Docker, Kubernetes, Jenkins
- **Testing & Quality**: Jest, Vitest, React Testing Library, Cypress, E2E Testing, TDD/BDD, Code Reviews
- **Tools**: VS Code, Eclipse, Chrome DevTools, Postman, Splunk, Tableau

Experience

Tata Consultancy Services   **Oct 2023 - Present**
Software Engineer (Client: US Bank)   *Irving, TX, USA*

- Implemented user-facing features with React and TypeScript and integrated them into onboarding/service flows in line with acceptance criteria, building SPA patterns with React Router for maintainability and performance.
- Built a reusable UI system using Atomic Design, custom React Hooks, and a structured Redux architecture; customized Bootstrap framework with Sass pre-processors for brand-consistent theming; documented components in Storybook to accelerate adoption.
- Delivered a configurator tool with drag-and-drop widgets and a stitching layer for settings, event listeners, and onLoad/onSubmit actions; used SpEL to enable highly configurable integrations and eliminate hard-coded logic.
- Established reliable UI-API integrations over RESTful microservices and GraphQL endpoints with structured error handling, response validation, and retry mechanisms; collaborated with backend teams on microservice designs to ensure smooth data flow.
- Optimized application performance through technical troubleshooting-analyzing React component rendering, implementing code splitting/lazy loading, and leveraging browser caching-reducing API call volume by 30% and improving page load times.
- Ensured code quality through comprehensive testing strategies including unit tests (Jest, Vitest), component testing (React Testing Library), and end-to-end testing with Cypress following Test Driven Development practices, achieving 85%+ code coverage.
- Partnered with business stakeholders and product owners for requirements gathering, translating business needs into technical solutions adhering to architecture standards, risk management protocols and security policies, delivering features that measurably improved operational efficiency.
- Led the UI team in an Agile setting, planning sprints, refining requirements, and mentoring offshore engineers. Held code reviews and delivered biweekly demos while maintaining a balanced workload, resulting in successful sprint completions with well-paced development and planning
- Practiced Continuous Integration and Continuous Delivery (CI/CD) through automated Jenkins pipelines in Docker/Kubernetes environments, enabling daily deployments with automated testing gates and DevOps collaboration.
- Managed deployments to lower environments and production releases on a fixed cadence with post-release monitoring and triage; provided global support and RCA (incl. Splunk), delivered time-critical fixes with minimal QA rework, and sustained a low defect rate.

Tata Consultancy Services   **Nov 2020 - Jan 2022**
Software Engineer (Client: US Bank)   *Hyderabad, India*

- Designed, developed, and tested HTML5/CSS3/JavaScript/React user interfaces with a focus on accessibility, cross-browser compatibility, and responsive design using SCSS, Sass, and customized Bootstrap framework following software design patterns.
- Built single-page applications using React (component-based patterns, React Router) and a reusable UI library (forms, inputs, toggles, multi-level dropdowns, icons) to deliver maintainable, consistent experiences.
- Integrated backend via RESTful web services, SOAP, and GraphQL (JSON/XML), implementing full CRUD flows with structured error handling; managed application state with Redux (stores, action creators, reducers, middleware such as Redux-Promise).
- Built event-aware UI patterns with Redux middleware to process asynchronous service updates and keep complex onboarding flows state-consistent in real time.
- Ensured quality and reliable delivery through unit/E2E testing (Jest), systematic debugging (Chrome DevTools), disciplined Git/GitHub workflows and code reviews, and close collaboration with QA/Scrum/Product to refine requirements and confirm acceptance criteria.
- Worked with database engineers on SQL query optimization and relational schema design to improve API response times by 40% for high-volume data retrieval operations and applied object-oriented programming (OOP) design principles to create modular, reusable components.

Achievements

- Awarded "Star Performer" and "On-the-Spot" at TCS for exceptional performance, ownership of high-impact features, and consistently delivering production-ready code with minimal review cycles.
- Recognized repeatedly by client leadership and senior product owners for mastering complex UI architectures, driving on-time releases, and demonstrating strong analytical, problem solving, and cross-team collaboration skills.

Education

University of Houston   **Jan 2022 - May 2023**
Master of Science, Data Science   *Houston, TX*

- **Achievements:** Recipient of 50% Tuition Fee Scholarship

Mahatma Gandhi Institute of Technology   **Aug 2016 - Sep 2020**
Bachelor of Technology, ECE   *Hyderabad, India*