
Krishna Sagar R

Technical Architect and Frontend Lead

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Technical Skills

JavaScript including **HTML** and **CSS (12 Years)**: **NodeJs** and **Server side (8 Years)** and Express.js and Nest.js. 8 Years experience in **React** and **Related build tooling** Like **Webpack (8 Years)**: **Next.js**, **Redux**, **RxJs** all latest features like React hooks and suspense, with **Webpack**. **Cypress (2.5 Years)**. **TypeScript (4 Years)**. **Experience with TDD and BDD approaches with Jest for Unit Testing (7 Years)**: Previously used other tools like mocha and Chai. **Observability and Application Performance monitoring (5 years)**. **CI/CD and Git Version control (8 Years)**. Experienced in setting up and managing Continuous Integration and Continuous Delivery pipelines. Skilled in automating the build, test, and deployment processes to ensure efficiency and reliability. **AWS Cloud (4 Years)**: Proficient in using Amazon Web Services (AWS). **Azure Cloud (2 Years)**: Familiar with Microsoft Azure cloud platform. **Google Cloud**: Basic. **UX Design Principles and Design Systems (8 Years)**. **Browser Network and Rendering Behaviour Optimizations (12 years)**

Embedded and Microprocessor Knowledge

I have some knowledge with both RISC and CISC instruction sets. In particular, I've worked with ARM architecture, using the ARM-11 processor for a real-time data acquisition project. Through this project, I've developed a practical understanding of how registers control operations and how memory is mapped and accessed in embedded systems. And also utilized JTAG for debugging and troubleshooting. Back then I used the ARM Keil tool. Language that I used is C.

More recently, I have also explored ESP32 RISC-V microcontrollers in reverse engineering perspective, broadening my knowledge of open-source processor architectures. This work has helped deepen my understanding of how RISC principles are applied in modern processor design. I have done some reverse engineering on RISC and CISC and RUST using LLVM tools.

Leadership experience

Professional with a track record of over 12 years in commercial software development.

Leadership Experience. Leading a **team of 10 members**. 5 members offshore and 5 members on site. Contributed to **Agile Delivery** using flow metrics (such as cycle time, throughput, and work item age) and Scrum ceremonies (like sprint planning, daily stand-ups, and retrospectives) to accurately forecast project timelines and enhance team productivity. increased deployment speed up to 70%. Being informed with risk identification.

UX and UI Design Principles Experience: **Solid Experience in coordinating with almost 10 UI/UI designers and understanding design principles**.

Technical Advocacy: Served as a technical advocate for 5 to 10 distributed teams in enterprise-scale IT environments. Demonstrated teams.

Proficiency in AB Testing, Web Content Management Systems (WCMS), and Search Engine Optimization (SEO) requirements for enterprise scale applications.

Adaptability: Proficient in seamlessly transitioning between **leadership** roles as a versatile **team player** and lead, demonstrating adaptability to diverse situations.

Experience

Senior Software Engineer Specialized in Frontend and AWS SSIT Cloud, England 18th August - PRESENT

Tech Stack: React.js, Hooks, Context, Webpack, Jest, NodeJs, Python. Cloud: AWS, Lambda, Git, Azure DevOps, TypeScript

- Developed features for operators to configure and manage charging stations, set pricing schemes, and handle firmware

- **Analytics & Reporting :** Developed Interfaces for viewing data analytics, such as energy consumption, charging session statistics.

Senior Software Engineer Specialized in Frontend Allica Bank, England Feb 2022 - May 2024 2.5 Years

Tech Stack: React.js, Hooks, Context, Webpack, Jest, NodeJs, Python. **Cloud:** Azure, Application Insights, Azure DevOps, Git, Azure DevOps, TypeScript

- **User Analytics:** Implemented and analyzed user analytics which increased more than 10% of users to have a smoother experience.
- **UX Performance Insights:** Monitored UX performance, achieving optimal page load times under 2 seconds
- **Application Health Monitoring:** Established robust application health monitoring systems, promptly addressing 95% of issues within 24 hours.
- **Frequent Deployments:** Increased frequency of deployments by 70% with collaboration and technical enhancements to the pipelines.
- **Feature Development:** Lead the delivery of most complex features in 2.5 sprints of predictable delivery. Led the development of critical features including International payments, bulk payments, card management etc collaborating with various teams to ensure both visual appeal and seamless integration into the overall user experience.

Technical Architect Specialized in Frontend TUI through Sonata Software Ltd, England June 2019 - 2021

Tech Stack: React.js, Redux, Context, Webpack, Jest, Enzyme, NodeJs, Python. **Cloud:** AWS, ALBs, EC2, GitLab, Git.

Technical Architect Duties: Oversaw technical architecture, including hiring, talent acquisition, performance reviews, and providing technical guidance to ensure the delivery of high-quality, scalable, and robust solutions. Collaborated with cross-functional teams, including SRE Team (Site Reliability Team), developers, and project managers, to define and implement best practices, coding standards, and architectural guidelines. Conducted code reviews, architecture assessments, and technical audits to maintain code quality and system integrity.

- **Core Framework Development:** Led the team responsible for building the core framework, ensuring alignment with the architectural vision.
- **Training and Mentorship:** Designed and conducted training for other frontend developers, promoting a full-cycle vision and enhancing their skills and understanding of the architecture.
- **Scalable Frontend Architecture:** Developed resilient, scalable, and implementable frontend architecture for enterprise-scale applications using a rapid prototype and test approach, aligning with business-critical paths. Fostered a team environment where individuals had a full vision of the architecture and pursued their passions to maximize their contributions.
- **Key Architectural Decisions:** Participated in decisions regarding key principles for future frontend architecture, ensuring a cohesive and forward-thinking approach.
- **Decentralized Team Autonomy:** Created frontend architecture that promoted the autonomy of decentralized teams, empowering them to work independently while aligning with overall architectural goals.
- **User Interface Development:** Created user interfaces and ensured their deployment to production through CI-CD pipelines, utilizing highly resilient and cost-optimized AWS cloud infrastructure. Integrated user interface layouts with content management systems like SAP's hybris WCMS, supporting seamless multi-locale functionality.

TUI Through Sonata Software Ltd, England **Lead Frontend Developer**

Tech Stack: React.js, Redux, Context, Webpack, Jest, Enzyme, NodeJs, Python. **Cloud:** AWS, ALBs, EC2, GitLab, Git. **Dojo,** TypeScript

January 2017 - June 2019

Frontend Code Implementation: Implemented the frontend code base in **React** and **Redux** from scratch, handling responsibilities such as performance optimization, continuous integration, unit testing, and configuring Webpack for the build system.

Scalable Codebase Design: Designed and implemented a scalable front-end codebase, ensuring robustness and efficiency.

Frontend Migration: Led the migration of the frontend to React and Redux within given timelines, ensuring smooth transitions and adherence to project schedules.

Continuous Integration: Configured the code base and continuous integration for the frontend, utilizing code quality tools to support the team and business in moving towards continuous delivery.

Team Motivation and Innovation: Inspired and motivated team members towards innovation and design thinking, fostering a creative and productive work environment.

Code Quality and Testing: Ensured the maintenance of high-quality code and effective unit tests, helping the team adhere to best practices.

Cross-Functional Coordination: Coordinated with Analytics, SEO, and UX teams to understand and integrate their requirements during the migration process.

Automation of Quality Checks: Automated front-end quality and performance checks to reduce defects and increase the speed of development.

Team Coordination: Coordinated both offshore and onsite teams to ensure seamless collaboration and project success.

Sonata Software Ltd -Hyderabad, India *Frontend Developer* February 2015 - 2017

Tech Stack: React.js, Redux, Context, Webpack, Jasmin, NodeJs, SVN Git. Dojo

Worked in multiple projects with multiple clients

Designed a flexible and scalable codebase architecture to facilitate rapid response to changes, enabling the development and deployment of working software within a timeframe of a couple of weeks to a couple of months.

Accelerated the delivery of user stories by ensuring high-quality code and robust unit test coverage, consistently meeting the standards set by peer reviews.

WAANDREAMS PIXELFLOW SYSTEMS, Hyderabad, India - *Frontend Developer*

2012 to January 2015

Developed rich front end applications

Developed Java applications with frameworks like structures.

EDUCATION

JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY KAKINADA - *B.Tech Electronics and Communication Engineering*

2012