

Seenaiah Podalakuru

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Seasoned Staff Software Engineer with 20 years of experience designing and building scalable, high performance, and reliable **full-stack** web applications. Proficient in modern JavaScript and Java frameworks including Angular, ReactJS for frontend, and Node.js and Java/Spring Boot for backend. Proven for strong leadership in team management, technical mentorship, and driving high-impact, high-performance software solutions. Passionate about innovation and delivering value through clean architecture in fast-paced, distributed environments.

High-level experience summary:

- **Front-end Development:** Over 10 years of experience designing and architecting scalable, modular, and secure single-page applications with a strong focus on responsiveness and user experience. Expertise in creating intuitive and accessible user interfaces that adhere to accessibility standards and provide seamless interaction across devices. Skilled in building reusable UI components and frameworks to enhance maintainability and accelerate development cycles. Proficient in implementing best practices for performance optimization, security, and scalability in complex frontend architectures.
ReactJs: 7 years of experience designing and developing robust web applications using React and Next.js frameworks. Expertise in building scalable, SEO-optimized single-page and server-side rendered applications leveraging Next.js features. Proficient in developing reusable, modular React components with modern patterns such as Hooks and Context API. Skilled in integrating RESTful and GraphQL APIs, managing global state, and optimizing performance across client and server.
Angular: 5 years of experience designing and developing enterprise-scale web applications using Angular with a focus on performance and maintainability. Skilled in state management using NgRx and reactive programming with RxJS for building scalable, event-driven applications. Experienced in modular architecture, lazy loading, and efficient use of Angular services and dependency injection for optimized performance. Developed responsive, accessible UIs using Angular Material, along with reusable components leveraging content projection and dynamic rendering. Proficient in delivering clean, maintainable code through component reusability, smart/dumb separation, and best practices in Angular design patterns.
- **Back-end Development:** Over 10 years of experience developing robust backend APIs and services using Node.js, Express, and NestJS. Skilled in designing RESTful and GraphQL APIs, implementing middleware, authentication, and scalable request handling. Over 6 years of hands-on experience with Java and Spring Boot for building monolithic and microservices-based systems. Proficient in architecting distributed services, integrating databases, and ensuring high availability and performance.
- **Architectural Expertise:** Over 4 years of experience architecting and implementing enterprise-grade distributed applications across diverse domains. Skilled at translating complex business requirements into scalable technical architectures using monolithic, microservices, and event-driven patterns. Designed and implemented resilient messaging solutions using Kafka, RabbitMQ, and IBM MQ for asynchronous workflows and real-time data pipelines. Focused on building fault-tolerant, decoupled systems with high availability, scalability, and maintainability as core design principles.
- **Cloud-Native Development:** 4 years of experience building scalable, resilient cloud-native applications leveraging AWS services and infrastructure-as-code. Developed event-driven, serverless applications using AWS Lambda (3+ years), integrated with services like API Gateway, S3, and DynamoDB. Built and deployed containerized microservices using Amazon ECS and EKS, enabling efficient orchestration and scalability. Proficient in infrastructure automation and deployment using AWS CDK, enabling repeatable, version-controlled, and secure environments.
- **Database Expertise:** Over 10 years of experience designing and implementing high-performance, scalable data solutions for enterprise-grade applications. Extensive expertise with relational databases such as SQL Server, PostgreSQL, and IBM DB2 for complex transactional and analytical workloads. Skilled in NoSQL databases including MongoDB and DynamoDB, with a focus on schema design, scalability, and performance tuning. Adept at choosing the right database technology based on application requirements, ensuring optimal data modeling, indexing, and query efficiency.
- **CI/CD Pipelines and DevOps Automation:** 4 years of experience implementing CI/CD pipelines and DevOps automation to support rapid, reliable, and secure software delivery at scale. Skilled in GitHub, Jenkins, Docker and containerization for consistent build and deployment environments across development, staging, and production. Integrated code quality and security tools like SonarQube and Veracode into pipelines, ensuring high standards in code quality and compliance.
- **Methodologies:** Proficient in Agile Scrum methodologies, driving iterative development and fostering effective team collaboration. Strong advocate of Test-Driven Development (TDD) to deliver reliable, maintainable, and well-tested code. Applied Domain-Driven Design (DDD) to create modular architectures aligned closely with business domains. Collaborated with cross-functional teams to ensure clear requirements, continuous feedback, and high-quality software delivery.
- **Leading:** Self-driven and highly efficient in independently managing and delivering complex projects with precision and accountability. Led and mentored teams of up to 12 engineers, fostering growth and ensuring high-quality project outcomes through effective guidance.
- **Trained** in Python and generative AI technologies, including large language models (OpenAI), LangChain, AI agents, vector databases, NLP, embeddings, Cursor AI, and related tools.

Tech Skills:

- **Frontend:** ReactJS, React hooks, JavaScript, Angular14, TypeScript, React Native, Redux, NgRx, GraphQL, NextJs, CSS3, TML5, Bootstrap 5, Tailwind, SASS, Angular CLI, Angular Material, Material UI, Node.
- **Backend:** NodeJS, NestJS, Java/Spring Boot, SSR, Express, JavaScript, TypeScript, REST APIs, Microservices.
- **AWS Cloud:** EC2, ECS, EKS, ECR, ECS Service Connect, Netflix Eureka, Serverless Lambdas, AWS CDK, API gateway, Load Balancer, Route 53, S3, CloudFront, CloudFormation, CloudWatch.
- **DevOps:** CICD Pipelines, Github, Jenkins, Docker, IBM uDeploy, GitHub actions, Copilot, SonarQube, Checkmarx, Jfrog, AWS - CodeCommit, CodePipeline, CodeBuild, CodeDeploy, terraform, NGINX, Tomcat, Nx.
- **Databases:** SQL Server, MySQL, PostgreSQL, DB2, MongoDB, DynamoDB.

- **Architecture:** Restful, Monolithic, Microservices, Event-driven. **Message brokers** - Kafka, RabbitMQ, IBM MQ, AWS SQS, SNS, and EventBridge.
- **Dev tools:** VS Code, IntelliJ Idea, Eclipse, NPM, Jira, Confluence, Chrome developer tools.

Professional Experience:

Staff Software Engineer | BNY Mellon | Lake Mary, FL | May 2024 - April 2025.

- Led the design and development of scalable, high-performance ReactJS applications with reusable components and modern state management (React hooks, Redux).
- Architected frontend solutions using React Hooks, functional components, and TypeScript, ensuring maintainability and testability.
- Spearheaded migration of legacy JavaScript/Angular codebases to modern React ecosystems, improving performance and developer productivity.
- Integrated RESTful APIs with robust error handling, loading states, and caching strategies using libraries like Axios and React Query.
- Implemented responsive and accessible UIs using modern CSS (CSS Modules, Tailwind CSS, Material UI).
- Designed and implemented scalable RESTful APIs using **Node.js** and **Express**, serving millions of requests per day with high availability, reliability and low latency.
- Led the migration of monolithic services to **microservices architecture** using **Node.js**, significantly improving deployment agility and fault isolation.
- Developed and maintained high-performance, event-driven services using **Node.js**, **TypeScript** improving system throughput by 35%.
- Built robust integrations with third-party APIs (e.g., payment gateways, authentication providers) leveraging **Node.js async/await** patterns for clean, non-blocking code.
- Established unit and integration testing strategies with Jest, React Testing Library, and Cypress, achieving high code coverage and CI/CD integration.
- Implemented secure authentication and authorization flows using **OAuth2**, **JWT** in Node.js-based services.
- Developed and deployed cloud-native applications on AWS, leveraging serverless and containerization technologies (AWS EC2, ECS, ECR, API Gateway, ALB).
- Implemented robust CI/CD pipelines, automating build, testing, and deployment processes, resulting in a 30% reduction in release cycle time.
- Mentored and provided technical leadership to a team of 5 engineers, fostering a culture of collaboration and continuous improvement.
- Designed and implemented data storage solutions utilizing both SQL and NoSQL databases, optimizing for performance and scalability.

Staff Software Engineer | Wells Fargo | Charlotte, NC | Feb 2023 - May 2024.

- Led a cross-functional team of 6 engineers in building a cloud-native enterprise analytics platform using React, Spring Boot, and AWS services.
- Led the design and development of scalable, high-performance ReactJS applications with reusable components and modern state management - React Hooks and Redux.
- Improved application performance through code-splitting, lazy loading, memoization, and custom hooks, reducing load times and enhancing user experience.
- Built reusable component libraries and UI frameworks for use across multiple applications, accelerating development and promoting consistency.
- Leveraged Next.js for server-side rendering (SSR), static site generation (SSG), and incremental static regeneration (ISR) to enhance performance and SEO.
- Mentored junior developers in ReactJS best practices, code reviews, and architectural decisions, fostering team growth and knowledge sharing.
- Designed and deployed microservices architecture with AWS ECS and Lambda to support scalability and high availability.
- Migrated legacy Java monolith applications to a modern serverless stack on AWS, reducing operational costs by 40%.
- Architected reusable UI components using React Hooks and Material UI, increasing frontend development efficiency by 30%.
- Implemented end-to-end CI/CD pipelines using Jenkins, GitLab, and CloudFormation templates for infrastructure automation. Conducted regular code reviews, design reviews, and mentoring sessions to uplift engineering standards across teams.

Lead Software Engineer | Progress Residential | Scottsdale, AZ | May 2022 - Jan 2023.

- Collaborated with internal and external teams for product requirements, and documented technical specifications, and reviewed them with the project's stakeholders.
- Led the design and development of scalable, high-performance ReactJS applications with reusable components and modern state management (Redux, Context API, Zustand).
- Architected frontend solutions using React Hooks, functional components, and TypeScript, ensuring maintainability and testability.
- Designed and developed high quality frontend interfaces and ensured its robustness in collaboration with UX and product teams.
- Designed and developed Angular components, improving code manageability and reusability by 60%.
- Optimized the system's overall performance by reducing component loading time by 30% across different web browsers.
- Analyze core applications in AngularJS and create technical designs for migrating the AngularJS modules to Angular 16 components. Designed and Implemented state management using RxJS and NgRX.
- Coordinated with Xlts, a third-party vendor for AngularJS support, to implement patches and ensure ongoing functionality of AngularJS applications.
- Advocated for and enforced code quality standards via ESLint, Prettier, Husky hooks, and Git workflow best practices (feature branching, PR reviews).
- Designed and developed Node.js backend APIs for maintenance, enhancements, upgrades, and production issue resolution.
- Conducted code scans and maintained code quality to ensure compliance with OWASP security standards.
- Participated in stand-up meetings, backlog reviews, refinement sessions, and PI planning, contributing thoughts.
- Assisted in the architectural migration of monolith NodeJS applications to microservices, using an event-driven pattern with Kafka as the message broker.
- Performed builds, deployments, and supported the production releases, including post-production validations.
- Provided technical leadership, mentorship, and guidance to a team of six engineers.

Sr. Software Engineer, Tech Lead | Mastech Digital | May 2012 - May 2022. Worked at multiple clients and locations.

- Architected, designed and led the development of complex, full-stack web applications using Angular/ReactJS for front-end and Node.js/Java Spring Boot for back-end APIs.
- Designed and implemented scalable microservices architectures, significantly improving system performance and maintainability.
- Developed and deployed cloud-native applications on AWS, leveraging serverless and containerization technologies (Lambda, ECS, EKS, AWS CDK, CloudFormation, API Gateway, ALB, S3, SNS, SQS, EventBridge, DynamoDB, CloudWatch etc.).
- Implemented robust CI/CD pipelines, automating build, testing, and deployment processes, resulting in a 30% reduction in release cycle time.
- Mentored and provided technical leadership to a team of engineers, fostering a culture of collaboration and continuous improvement.
- Drove the adoption of modern development practices, including DDD, TDD, and agile methodologies.
- Designed and implemented data storage solutions utilizing both relational and NoSQL databases, optimizing for performance and scalability.
- Designed, developed Angular components and modules leveraging providers, NgRX, RXJS.
- Refactored legacy codebase reducing bundle size by 30%, which significantly improved application load times, user experience, and reusability.
- Designed and developed Restful APIs and consumed from the frontend interfaces using Fetch, Axios and Angular Http client and angular services.

Tech Lead, Project Lead, Manager | Wipro Ltd | Jan 2003 - Jul 2012. Worked at multiple clients and locations (India & USA).

- Lead end-to-end project lifecycle from initiation through delivery, ensuring projects are completed on time, within scope, and on budget.
- Collaborate with cross-functional teams including engineering, QA, UX/UI, DevOps, and stakeholders to define project requirements and deliverables.
- Develop and maintain detailed project plans, timelines, resource allocation, and risk management strategies.
- Manage stakeholder communications, status reporting, and expectations throughout the project lifecycle.
- Drive Agile/Scrum ceremonies such as sprint planning, daily stand-ups, retrospectives, and sprint reviews.
- Monitor and track project performance using tools like JIRA, Confluence, and project dashboards.
- Identify and resolve project roadblocks, bottlenecks, and risks proactively.
- Coordinate release management and deployment planning in collaboration with engineering and operations teams.
- Foster a culture of continuous improvement by analyzing project outcomes and implementing process enhancements.
- Mentor and support team members to encourage professional growth and alignment with project goals.
- Lead the design and architecture of scalable backend solutions using Java, Spring Boot, and microservices architecture.
- Designed, developed, and maintained robust backend services and RESTful APIs using Java and Spring Boot.
- Participated in architecture discussions, system design reviews, and technical planning sessions.
- Integrated third-party APIs and managed data persistence with SQLdatabases (DB2, Oracle).
- Designed and developed mainframe applications using COBOL, DB2, JCL, CICS.
- Designed and developed CICS Web services and integrated with Java services.

Tech Stack:

Java, Spring Spring Boot, Restful Web Services, SOAP Web services, Tomcat, DB2, JDBC, WSDL, SOAP UI, XML, Eclipse IDE, GitHub, Jenkins, **Mainframes** - COBOL, CICS, DB2, MQSeries, JCL, VSAM etc.

Education:

- Bachelor of Technology in Mechanical Engineering, Sri Venkateswara University, Andhra Pradesh, India.