Venkata Janapareddy

Senior Frontend Engineer

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Summary

Senior Frontend Engineer with 10 years of experience bridging design and engineering to create user-centered, accessible, and performant web experiences. Expertise in rapid prototyping, design systems, and frontend architecture, with a track record of leading engineering teams and mentoring developers at Amazon and enterprise companies.

Technical Skills

UX Engineering & Design: Prototyping & Wireframing (Figma, Framer, Sketch, Penpot), User-Centered Design, Design Systems, Storybook, Material Design, AWS CloudScape, Web Accessibility (WCAG 2.2 AA, ARIA), Responsive Design, Mobile-First Design, PWAs, Usability Testing, A/B Testing, Animation (Framer Motion, CSS)

Frontend Development: JavaScript (ES6+), TypeScript, HTML5, CSS3/SASS/Tailwind CSS, React, Next.js, Astro, Remix, Vue.js, Angular, React Native, Web Components (Lit), Microfrontends, Module Federation, Redux, Redux Toolkit, Zustand, TanStack Query, Context API, GraphQL, REST APIs, Web Sockets

Web Platform & Performance: Lighthouse, Core Web Vitals (LCP, INP, CLS), Performance Observer, AWS RUM, View Transitions API, Navigation API, Service Workers, Web Workers, Intersection Observer, IndexedDB, Code Splitting, Progressive Enhancement AI/ML Integration: LLM APIs (OpenAI, Anthropic Claude, Gemini), Vercel AI SDK, Prompt Engineering, RAG (LangChain, LlamaIndex), Natural Language Interfaces, Streaming Responses (SSE, WebSockets), TensorFlow.js, Vector Databases (Pinecone)

Testing & Quality: Vitest, Jest, React Testing Library, Playwright, Cypress, Puppeteer, TDD, E2E Testing, Visual Regression Testing, Lighthouse Auditing, Accessibility Testing (axe-core, jest-axe, Pa11y)

Backend & Infrastructure: AWS (CloudFront, S3, Lambda, Lambda@Edge, API Gateway, DynamoDB, Amplify), Node.js, Express.js, Fastify, Python, C#, .NET, PostgreSQL, Supabase, MongoDB, OAuth 2.0, REST APIs

Developer Tools: Bun, pnpm, Vite, Turbopack, Webpack, ESLint, Biome, Prettier, Docker, CI/CD (GitHub Actions, Jenkins, CircleCI), Git, Chrome DevTools

Professional Experience

Senior Frontend Engineer

Amazon

Oct 2022 - Present

Austin, TX • Serve as principal UX engineer for mission-critical Amazon Security products, prototyping and evaluating user experiences

- utilizing React, TypeScript, and AWS CloudScape Design System to create intuitive, accessible interfaces • Drive user-centered design by creating high-fidelity interactive prototypes in React to validate product concepts, collaborating with UX researchers and designers to inform product decisions through rapid iteration and usability testing
- Pioneer design system evolution by building and maintaining reusable component libraries, establishing design tokens, and creating comprehensive documentation that bridges design and engineering teams
- Lead frontend architecture and development strategies across multiple projects, making critical technical decisions that impact the entire application ecosystem for enterprise security tools
- Establish and enforce frontend development standards, best practices, and coding guidelines, ensuring consistency across 10+ internal applications used by thousands of Amazon employees
- Mentor and train engineers in frontend best practices, prototyping techniques, and design thinking, fostering a culture of continuous learning and user-centered development
- Collaborate closely with cross-functional teams (UX Design, Product Management, Backend Engineering, Security) to deliver solutions that balance user needs, business requirements, and technical constraints

Senior UI Engineer

Oct 2019 - Oct 2022

Pontiac, MI

United Wholesale Mortgage

- Architected and developed customer-facing web applications for mortgage brokers and lenders, building self-service platforms and loan processing interfaces that streamlined mortgage workflows for UWM's broker network
- Led **UX prototyping initiatives** by creating wireframes and interactive prototypes in Figma and React, reducing design-to-development cycle time by 40% through early stakeholder validation and usability testing
- Designed and implemented multi-step form workflows for loan processing applications, improving task completion rates by 35% through user-centered design principles and accessibility best practices
- Served as lead engineer overseeing 14 UI engineers across multiple teams, ensuring high-quality product development, adherence to project timelines, and consistent application of frontend engineering best practices
- Established company-wide design system by collaborating with UX designers to create reusable React component library, design tokens, and usage guidelines adopted by 6 product teams

Senior Software Engineer Mar 2019 – Oct 2019

PointClickCare Waterloo, ON, Canada

• Built **enterprise B2B web applications** for healthcare providers using React ecosystem, focusing on user experience for clinical workflows and patient management interfaces

- Collaborated with UX designers to bridge the gap between graphical design and technical implementation, developing a company-wide design system that standardized UI patterns across 12+ healthcare applications
- Created **interactive prototypes** to validate complex clinical workflows, conducting usability testing with 15+ healthcare professionals to inform design decisions

JavaScript EngineerFeb 2018 - Feb 2019Royal Bank of CanadaToronto, ON, Canada

- Developed **enterprise banking web applications** leveraging React, Redux, Node.js, and PostgreSQL for internal operations and customer-facing financial services
- Designed and implemented **user-friendly interfaces** for complex financial workflows, collaborating with UX designers to translate graphical designs into accessible, performant technical implementations
- Built and maintained **CI/CD pipelines** (GitHub, CircleCI, AWS), deploying containerized applications (Docker, AWS ECS) across development, staging, and production environments

Frontend Engineer

Jul 2015 – Jan 2018

American Family Insurance

Madison, WI, USA

- Developed **enterprise single-page applications (SPAs)** utilizing Angular JS and Angular 2 for insurance operations teams, enhancing user experience and optimizing application performance for internal business workflows
- **Prototyped new features** using rapid development techniques, validating concepts with stakeholders before full implementation, reducing rework by 30%
- Modernized pre-existing APIs into **microservices architecture** (Node.js), resulting in increased scalability and maintainability for enterprise insurance systems

2014 - 2015

Education

University of Central Missouri

M.S., Computer Information Systems & Information Technology

Andhra University

Bachelor's, Computer Science Engineering 2008 – 2012