

VENKATA KOPPARTHI

Senior Full Stack Engineer — React.js, TypeScript, Node.js, Python/FastAPI

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PROFESSIONAL SUMMARY

Senior Full Stack Engineer with 10+ years building scalable React.js and TypeScript applications, backed by strong hands-on Node.js and Python (FastAPI) backend development. Holds the title of Engineering Lead at Innovation Associates, where the role remains hands-on — contributing to front-end architecture and technical direction while writing code day to day. Cut page load time by 35% and bundle size by 25% through systematic front-end performance work, and has also shipped AI-powered features, including a RAG-based chatbot. Mentors engineers on React.js and TypeScript in fast-paced Agile/Scrum environments.

- Designs and delivers scalable full-stack applications, with a focus on performance, maintainability, and long-term architecture health.
- Builds high-performance, responsive applications in React.js, Next.js, TypeScript, Redux Toolkit, and modern JavaScript (ES6+), including SSR with Next.js.
- Develops backend services in Node.js and Python (FastAPI) — RESTful APIs, request/response modeling, validation, middleware, and integrations.
- Builds component libraries and design systems with Tailwind CSS, Styled Components, Material UI, and Storybook.
- Works in CI/CD (Azure DevOps), Git, and Agile/Scrum environments, collaborating closely with product, design, and QA.
- Holds the title of Engineering Lead at Innovation Associates, contributing to front-end architecture, code reviews, and mentoring.
- Has also shipped AI-powered features, including a production RAG chatbot built on the OpenAI API and pgvector.

CORE TECHNICAL SKILLS

- Frontend: React.js, Next.js, TypeScript, JavaScript (ES6+), Redux, Redux Toolkit, React Query, React Hooks, Context API, HTML5, CSS3, Tailwind CSS, Styled Components, Material UI, jQuery, Recharts, Highcharts
- Backend & APIs: Python, FastAPI, Flask, Node.js, Express, RESTful API Development, Asynchronous Programming, SQL, PostgreSQL, MongoDB, Firebase, Kafka
- AI & Generative AI: OpenAI API, Azure OpenAI Service, Retrieval-Augmented Generation (RAG), Prompt Engineering, pgvector, Hugging Face
- Productivity & AI Tools: Claude Code, GitHub Copilot, Figma Dev Mode MCP
- Testing & Quality: Jest, React Testing Library, Enzyme, Debugging, Performance Tuning, Accessibility (WCAG 2.1), Cross-Browser Compatibility
- Design Systems: Storybook, Design Tokens, Figma, Coding Standards
- DevOps/Tools: Webpack, Babel, npm, Git, Docker, CI/CD (Azure DevOps), Kubernetes (basic), Jenkins (basic), AWS (basic)

PROFESSIONAL EXPERIENCE

Innovation Associates, New York, USA

Role: *Engineering Lead* | *Senior Full Stack Engineer*

Oct 2021 – Present

- Led front-end architecture for key product areas in a monorepo, building scalable React.js applications with TypeScript, Redux Toolkit, and modern JavaScript (ES6+).
- Built and maintained RESTful API endpoints in Python (FastAPI) and Node.js, covering request/response modeling, validation, and error handling for services consumed directly by React applications.
- Designed reusable UI component libraries with Tailwind CSS, Styled Components, and Material UI, accelerating delivery and ensuring consistency across engineering teams.
- Cut page load time by 35% and bundle size by 25% through code splitting, memoization, and lazy loading; extended React applications with Next.js for SSR and routing improvements.
- Overhauled the responsive UI, raising user engagement by 30% after launch.
- Improved state management, making the application 40% more responsive.
- Shipped a RAG-based chatbot on the OpenAI API and pgvector, answering cited questions across 1,000+ documents.

- Use Claude Code, GitHub Copilot, and Figma Dev Mode MCP day to day, and review all AI-generated code against architecture and security standards before it merges.
- Mentor engineers on React.js, TypeScript, and modern JavaScript through code reviews and 1:1s, providing feedback on quality, architecture, and career growth.
- Maintain WCAG 2.1 accessibility compliance across core user flows, resolving cross-browser issues through systematic testing.
- Partner with product managers, designers, and QA on business requirements and Agile ceremonies, including sprint planning, to deliver cross-functional features each quarter.

Accenture, Hyderabad, India

Role: Software Engineering Analyst

Dec 2019 – Oct 2021

- Delivered full-stack applications with React.js and Node.js, covering both the user interface and the back-end services behind it, for business-critical use cases.
- Reduced production defects by 15% through rigorous code reviews and quality-focused development practices within a distributed Agile team.
- Improved initial page load by 20% and cross-browser compatibility through systematic testing, lazy loading, and asset optimization.
- Delivered responsive, WCAG-aligned UI components for new features, applying component-based design patterns to reduce duplication.
- Designed and integrated RESTful APIs with Redux-managed state across multiple modules, ensuring smooth data flow between front-end and back-end systems and cutting load times by 25%.
- Increased user engagement by 30% on a complex web application through focused UX design and streamlined interaction flows.
- Refactored legacy codebases for performance, cutting server response times by 20% during peak traffic.
- Turned user feedback into iterative design cycles that raised user satisfaction ratings by 40%.
- Wrote unit tests with Jest to verify component logic, partnering with QA to resolve defects pre-release.

EDS Technologies, Bengaluru, India

Role: Software Engineer (joined as Front-End Intern)

Jul 2016 – Dec 2019

- Translated UI/UX designs and static mockups into production-ready React, JavaScript, and TypeScript code.
- Created reusable UI components and responsive layouts with HTML5, CSS3, and Sass across desktop, tablet, and mobile applications.
- Integrated RESTful APIs to retrieve and display live data across product modules within React applications.
- Debugged and resolved front-end defects from QA and UAT; onboarded new team members onto the codebase.

CERTIFICATIONS / KEY ACHIEVEMENTS

- Claude Certified Developer, Foundations (CCDV-F) — Anthropic, proctored via Pearson VUE, Sep 2026
- Node.js Certification — HackerRank
- Frontend Developer (React) Certification — HackerRank

EDUCATION

B.Tech, Electronics & Communication Engineering

Jawaharlal Nehru Technological University Kakinada, Kakinada, India — 2012 – 2016