

# JAIGANESH RAO

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## PROFESSIONAL SUMMARY

Full Stack Software Engineer with 5+ years of experience building scalable applications across frontend, backend, and cloud. Proven success driving UI/UX decisions, architecting microservices, and delivering performant solutions across fintech, research, and enterprise products. Adept in React, Node.js, Python, AWS, and modern frameworks with a strong foundation in data structures, API design, and system integration.

## PROFESSIONAL EXPERIENCE

### Afficiency Inc.

Full Stack Developer

New York, NY, USA

September 2023 - Present

- Architected and deployed cloud-native insurance SaaS platform using React.js, Flask, and AWS (EC2, S3, CloudFront), serving 30,000+ agents across 5+ insurance carriers, driving millions in revenue growth.
- Led frontend architecture design by building modular React component library with reusable UI components, custom hooks, and centralized state management using Redux Toolkit and Zustand, reducing frontend development time by 20% and improving code maintainability.
- Engineered high-performance REST APIs integrating multiple third-party data providers, optimizing SQL queries and leveraging Redis caching to improve system throughput and reduce response times by 60%.
- Built AI-powered internal automation tools for data processing, automated reporting dashboards, and system monitoring, reducing manual operations workload by 40%.
- Implemented comprehensive UI monitoring with LogRocket, automated CI/CD pipelines using GitLab and Docker, conducted 2,000+ code reviews, and managed deployments across QA, Demo, and UAT environments, improving release consistency and quality by 35%.

### Systems Engineering Research Center (SERC)

Full Stack Developer

Hoboken, NJ, USA

July 2022 - June 2023

- Designed and launched Helix, a multi-survey research platform using React.js, Node.js/Express, MySQL, and AWS infrastructure (EC2, S3, Cognito), supporting 20,000+ active researchers with data collection and behavioral analysis capabilities.
- Led complete frontend migration from legacy PHP Laravel monolith to modern React.js SPA with React Router, code-splitting, and lazy loading, improving application performance by 40% and reducing bundle size while enhancing maintainability.
- Developed reusable component library using React hooks and compound component patterns, reducing code duplication by 50% and accelerating feature development velocity by 25%.
- Architected secure RESTful API backend with Node.js/Express implementing role-based access control (RBAC), JWT authentication, input validation with Joi, and SQL injection prevention, ensuring data security for sensitive research data.
- Containerized application with Docker and deployed to AWS EC2 with automated CI/CD pipeline using GitHub Actions, reducing deployment time to 15 minutes and achieving 99.9% uptime SLA.

### LTI - Larsen & Toubro Infotech

Software Engineer - Cloud & Infra Services

Navi Mumbai, Maharashtra, India

January 2019 - July 2021

- Developed enterprise production management application using MERN stack (MongoDB, Express.js, React.js, Node.js) and AWS services, serving 50,000+ users across global teams with real-time data synchronization and analytics dashboards.
- Achieved 10x performance improvement by implementing server-side caching with Redis, optimizing MongoDB aggregation pipelines and indexing strategies, and refactoring inefficient algorithms, reducing average API response times from 3 seconds to 300ms.
- Designed and developed 200+ RESTful API endpoints with Express.js following REST best practices, implementing pagination, filtering, sorting, and comprehensive error handling to support scalable enterprise-level traffic.
- Refactored monolithic Node.js backend into microservices architecture, decomposing services by domain boundaries, enabling independent deployments and horizontal scaling while reducing inter-service dependencies.
- Collaborated in Agile/Scrum teams through daily standups and sprint planning, integrated New Relic and Nagios for application performance monitoring and infrastructure observability, and partnered with QA to implement automated testing, achieving 80% code coverage.

## TECHNICAL SKILLS

Python, JavaScript ES6, TypeScript, Java, C, C++, SQL, HTML, CSS, React, Next.js, Vue, Redux, Zustand, React Query, React Native, Flask, Node.js, Express, GraphQL, Expo, npm, FastAPI, MongoDB, PostgreSQL, MySQL, SQLAlchemy, SQL Server, Redis, NoSQL, AWS, Azure, GCP, Vercel, Firebase, GitHub, Git, Azure Repos, CI/CD, Postman, Docker, NGINX, UX/UI, JIRA, Miro, Figma, Chakra UI, Agile.

## EDUCATION

### Stevens Institute of Technology

Master's, Computer Science

August 2021 - May 2023

GPA: 3.84

- Award: Provost's Master's Scholarship
- Coursework: Web Development, Cloud Computing, Agile Methods for Software Dev, Fundamentals of Computing, Database Management System, Object-Oriented Analysis & Design, Data Structures & Algorithms, Software Engineering

### University of Mumbai

Bachelor's, Computer Science

May 2015 - June 2018

GPA: 3.5

## TECHNICAL PROJECTS

### JumpToCode - React Developer Chrome Extension

- Built a Chrome Extension to map React UI components to their source files, enabling one-click navigation to the exact code line in VS Code.
- Implemented React Fiber traversal (React Fiber, Node.js, Express) to extract metadata and file paths with secure localhost-only server access.
- Designed an interactive debugging featuring hover highlights, real-time component info, and keyboard shortcuts for faster navigation (VS Code CLI).

### MultiPDF-ChatBot AI

- Developed an AI chatbot (Python, Hugging Face, LangChain) enabling interactive Q&A across multiple PDFs using the Instructor-XL model.
- Implemented PDF parsing, vector retrieval chains, and contextual response generation (Faiss, LangChain) for accurate document-based answers.
- Built an interactive web interface (Streamlit) supporting multi-PDF uploads and real-time conversational exploration.

### TULSEE

- Built a teamwork platform (React, Node.js, MongoDB) for personal and group projects with full CRUD functionality for tasks.
- Added real-time group chat with end-to-end encryption, media/document uploads, and project archiving (Socket.io, Express, Firebase).
- Integrated Google SSO and Zoom API for seamless meeting scheduling and collaboration within projects.