Sambhavi Gajula

Brooklyn, NY | +1 (551) 689-5255 | gajulasambhavi@gmail.com | LinkedIn | GitHub

EDUCATION

Masters of Science in Computer Science **Sep 2023 – May 2025**
Long Island University, Brooklyn, Brooklyn, New York

Jawaharlal Nehru Technological University, Kakinada **Aug 2018 – May 2022**
Bachelor of Technology in Electronics & com. Engineering, India

SKILLS

Languages & frameworks: Python, JavaScript (ES6+), TypeScript, SQL, Bash | Vue.js, React.js, Next.js, Django, Node.js, Express.js, Redux, Context API, Zustand, TanStack Query, REST APIs,FastAPI, gRPC, HTML5, CSS3 | Tailwind CSS, Material-UI (MUI), Bootstrap | PostgreSQL, MySQL, MongoDB, Redis, DynamoDB, SQLite

Developer Tools & Testing: GCP (Compute Engine, Cloud Run, Cloud Functions, Firestore, BigQuery, Cloud Build), AWS (EC2, S3, Lambda, RDS, CloudFormation), Microsoft Azure, Heroku, Netlify, webpack, babel | Docker, Vercel, Langchain, Kubernetes, Jenkins, GitHub Actions, Terraform, Helm, Prometheus, Grafana | Git, GitHub, GitLab | JUnit, RTL, Jest, Mocha, Cypress, Vitest, MSW, Data Structures & Algorithms, Agile methodologies, Android/IOS, Cursor AI

EXPERIENCE

Springer capital, IL | UI developer **Aug 2025 – Present**

- Built a high-performance analytics dashboard using **Next.js** and data-driven UI patterns, delivering smooth interactions and fast load times for complex, data-heavy views. Implemented **real-time updates with Server-Sent Events (SSE)** and introduced **virtualized rendering** to handle 10k+ records without UI lag, maintaining responsive charts and tables under heavy load.
- Used **D3.js** to craft interactive visualizations and profiled the app with React Profiler and flamegraphs to remove rendering bottlenecks, improving stability and responsiveness across the dashboard. Enhanced usability through clear visual hierarchy and consistent interaction patterns, increasing user engagement with key analytics surfaces.

Charles Schwab, NC | AI Interface Engineer **Jan 2025 – May 2025**

- **Designed and deployed** a multi-layer **liveness detection pipeline** connecting React-based vision modules with **Python, FastAPI** inference endpoints for AI-driven KYC verification. **Built an interactive React + TypeScript + Tailwind CSS interface** for multimodal identity verification, integrating **OpenAI APIs** and **Hugging Face** models with *cosine-similarity embedding validation* for cross-modal face-to-document matching.
- Integrated Kafka for event-driven message brokering, gRPC for high-performance interservice communication, Redis caching for low-latency identity checks, and WebSocket channels for real-time user feedback and **challenge–response flows**, achieving *p95 end-to-end frame-to-decision latency of 150 ms* between client motion tracking and backend validation.
- **Containerized and orchestrated distributed microservices** using **Docker** and **Kubernetes**, ensuring multi-AZ resilience, and sustaining a *99.9 % API SLO* over a 90-day monitoring window. Automated verification reporting **and audit trails** with **AWS Lambda**, **S3**, and **CloudWatch**, streamlining compliance workflows and cutting data aggregation time from 4 hours to 1.5 hours (≈ 60 % faster)
- **Optimized front-end rendering and caching layers** through route-level code-splitting, memorized selectors, and CDN caching—reducing interactive load times by 28 % and increasing completed KYC session throughput by 22 %.

Rhabdom solutions | Front-end Developer **May 2023 – Aug 2023**

- Championed a test-driven development workflow using Jest, React Testing Library, and Cypress, achieving 95% test coverage across new React components and reducing post release defects by 25%.
- Designed and maintained scalable testing architecture integrated into CI/CD pipelines (GitHub Actions), ensuring automated regression testing and early bug detection during each deployment cycle. Refactored legacy components into modular, testable units using React hooks and TypeScript, improving maintainability and test reliability while adhering to SOLID principles.
- Collaborated with product and QA teams to define test acceptance criteria before development, aligning business requirements with technical implementation and boosting delivery confidence. Guided fellow developers on TDD principles and testing best practices, creating documentation and test templates that streamlined onboarding and improved code review quality.

Big Leap Technologies Pvt LTD, India | Full-Stack Developer **April 2022 – May 2023**

- Developed modular React and TypeScript applications using Redux Toolkit and TanStack Query, enhancing UI reactivity, and cutting page latency by 25%, improving customer engagement across platforms.
- Constructed reusable UI component libraries aligned with Material UI standards, reducing front-end development effort by 30% and ensuring design consistency across 6 core web modules. Integrated GraphQL APIs using Node.js and PostgreSQL, decreasing backend query latency by 20% and enabling scalable data flow for 10,000+ concurrent users.
- Partnered with design & product teams to enhance accessibility compliance, implementing lazy loading & dynamic routing that improved Lighthouse accessibility scores by 18%. Automated build and deployment pipelines with Docker, AWS EC2, and GitHub Actions, reducing deployment time by 40% and standardizing continuous delivery across multiple staging environments.
- Implemented comprehensive unit and integration testing using Jest and Cypress, achieving 92% code coverage, and minimizing regression defects across major releases.
- Monitored and fine-tuned application performance using Prometheus and Grafana, maintaining 99.9% uptime and boosting response efficiency during growing traffic surges.

Hexaware Technologies, India | Software Engineer Associate **Jul 2020 – Dec 2021**

- Developed responsive web interfaces using React.js, Redux, and Tailwind CSS, enhancing UI responsiveness and increasing user engagement by 2x, which significantly improved client satisfaction scores.
- Implemented RESTful APIs using Django and MySQL, streamlining inventory operations and cutting backend transaction latency by 30%, ensuring accurate and faster order processing. Migrated legacy systems into containerized microservices, reducing downtime by 40% and improving release stability for enterprise-level clients handling high-volume transactions.
- Optimized SQL schema and queries for efficient data retrieval, cutting query execution time by 25% and enhancing backend response under concurrent load conditions.
- Connected frontend and backend services using React Query and asynchronous request handling, reducing UI latency by 22% and improving real-time user experience.
- Established Jenkins-based CI/CD pipelines integrated with Docker and GitHub Actions, accelerating deployments by 50% and ensuring consistent build integrity.
- Conducted automated testing with JUnit, Jest, and Postman, lowering production bugs by 35% while ensuring API reliability across environments.
- Deployed microservices on Azure Kubernetes Service (AKS) via Helm, achieving 99.9% uptime and ensuring consistent high availability for client-critical applications.

PROJECTS

SmartHealth | React, Node.js, Express.js, Prompt Engineering, OpenAI, Redux Tool Kit, JWT – Link

- Developed and deployed a React-based telemedicine platform with secure patient-doctor interaction, EHR management, and an AI-powered symptom checker providing firstaid recommendation.
- Implemented role-based access control & JWT authentication, ensuring scalable and secure app flow deployed on AWS (EC2, S3, RDS) with secure IAM policies, environment variable protection, real-time analytics. Integrated real-time analytics and monitoring dashboards to track appointment metrics and system performance, improving data visibility and operational efficiency by 30%.

RideTogether | React Native, Typescript, Google Maps API, Zustand, Firebase, Next.js – Link

- Engineered a cross-platform mobile app with React Native and Google Maps APIs for ride-sharing, featuring real-time ride tracking, nearest-ride suggestions, and dynamic pickup optimization using Places & Traffic APIs.
- Optimized state management through Zustand, reducing re-renders and improving UI responsiveness by 25%, while maintaining seamless synchronization with Firebase's real-time database.
- Developed a scalable Firebase backend leveraging Firestore for ride management, Firebase Authentication for secure login, and Cloud Messaging for instant notifications and live ride updates.