Sai Venkat

EXPERIENCE

Software Engineer | PathSynch Labs, Atlanta, USA (Remote)

Apr 2025 – Present

- Built logic and UI for ShortURL and QR Code creation using ReactJS, TypeScript, and Java, storing data in Google Firestore with latency under 40ms.
- Implemented real-time sync between MongoDB and BigQuery using Google VM and Pub/Sub, maintaining less than 5-second lag for analytics on 100,000+ records.
- Deployed ShortURL-QRCode API on Google VM, achieving 99.98% uptime and processing 10000+ redirects daily via custom domain qrsyn.ch.
- Generated sentiment word clouds from Google Places reviews using VertexAI NLP, analyzing 1,200+ reviews/week with 92% accuracy.
- Leveraged prompt engineering on Gemini AI to generate comprehensive competitor insights—analyzing strengths, weaknesses, and growth opportunities against the top 5 competitors within a 10-mile radius, and ranking them.
- Created subscription-based access control with Java and Firestore, supporting 3-tier plans with enforced limits up to 1000 Short URLs and 200 QR Codes/user/month.
- Integrated **Stripe API** for recurring payments, automating billing for **3-tier plans** with real-time webhook handling and subscription state updates. Supported **500+** active sessions per month with less than **2-second** payment confirmation latency.
- Built dynamic logic for subscription upgrades and cancellations, syncing with MongoDB and enforcing plan limits without downtime. Handled 100+ tier changes per month while maintaining 100% data consistency across user sessions
- Tested and deployed features to AWS EC2 using Nginx reverse proxy, maintaining 99.9% stability and handling 2,000+API requests/day.
- Automated deployment pipeline using **GitHub Actions** with **self-hosted EC2 runners**, incorporating multiple **failsafes in YAML workflows** to ensure reliable, hands-off deployments.

Software Engineer | Truviq Systems, India

Feb 2021 - Nov 2022

- Engineered a dashboard using Java, ReactJS, and RESTful APIs to display performance reports of customer representatives over 30 days with filter & sort operations, increasing issue visibility by 17% and improving performance management by 22%.
- Leveraged **SendGrid API** to streamline user onboarding with automated **verification emails**, and implemented **real-time notification delivery** to enhance user engagement.
- Created a single-page application (SPA) using HTML, CSS, ReactJS, Java, MySQL, and Oracle11g to provide personalized data and alerts, increasing profile utilization by 65%.
- Implemented a business/personal profile settings page using ReactJS, Tailwind CSS, Java, and npm to maintain the most up-to-date user profile data across the system.
- Designed and developed a comprehensive Knowledge Box feature allowing users to input business data—such as Ideal Customer Profiles (ICPs), product/service details, value propositions, and key pain points—to deliver a personalized experience for both users and their customers.
- \bullet Performed stress and unit testing and deployed features to AWS EC2 using Docker.
- Collaborated with teams in an Agile environment using JIRA, reducing the product timeline by 32%.
- Maintained and troubleshot CI/CD pipelines using Jenkins and Docker, achieving early deployment by 2 weeks.

Associate Solutions Engineer | Pega Systems, India

Jul 2019 – Feb 2021

- Built a feature for managing call transfer reasons using HTML, CSS, JavaScript, ReactJS, and NodeJS, enhancing customer service efficiency and reducing issue resolution time by 25%.
- Resolved an average of **3 bugs/day**, totaling around **60 fixes** during the regression phase, resulting in a **32-point** increase in compliance score—from **65 to 97**.
- Formulated and implemented intelligent routing logic in Java using the Spring framework, optimizing incoming requests and increasing resolution speed by 65%.
- Developed the 'CTI (Computer Telephony Integration) link setup' API in Java, allowing admins to start, stop, restart, and perform CRUD operations on CTI links such as CISCO ICM, improving customer engagement by 72% via phone calls.
- Developed a **notification settings** feature enabling users to receive alerts via **email**, **SMS**, or **push notifications**, integrated using **SendGrid**, **Twilio**, and **browser push with VAPID**. Built with **React.js**, **Tailwind CSS**, and **Lucide-react** on the frontend, and integrated with a **Java Spring** backend.
- Engineered the 'Interaction Configurations' microservice, enabling admins to customize interaction experiences for chat, or call using JavaScript, JQuery, and SOAP, with data exchange in XML and SQL, resulting in a 35% increase in customer satisfaction

TECHNICAL SKILLS

Programming & Databases: Java, Python, SQL, NoSQL, MySQL, PostgreSQL, MongoDB, Oracle Web Technologies: HTML5, CSS, JavaScript, TypeScript, ExpressJS, ReactJS, NodeJS, Tailwind, Bootstrap Libraries & Frameworks: Pandas, TensorFlow, Scikit-Learn, Matplotlib, Django, D3JS, JSP, Spring Boot Cloud Platforms & Tools: AWS, GCP, Git, GitHub, Docker, Kubernetes, Nginx, Jenkins, Apache Kafka, WebSockets Additional Expertise: SHadoop Stack, Airflow, Kafka, NiFi, PostgreSQL, Linux, TDD, GraphQL

EDUCATION

University of North Carolina at Charlotte | Charlotte, NC

Jan 2023 - May 2024

Master of Science in Computer Science

Osmania University | Hyderabad, India Bachelor of Engineering in Computer Science Aug 2015 - May 2019