Sai Sarath

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Summary

Full Stack Software Engineer with 3 years of experience delivering scalable microservices and user interfaces using Spring Boot and React.js. Enhanced system reliability through containerized deployments with Kubernetes and Docker and real-time data workflows with Apache Kafka and DynamoDB Streams. Improved data security by implementing robust authentication protocols, including JWT and OAuth. Automated cloud infrastructure using AWS to streamline development and deployment processes. Dedicated to solving complex software challenges with efficient and practical solutions.

Education

Master of Science in Computer Science and Engineering | University at Buffalo, New York **May 2024**

Bachelor of Technology in Software Engineering | Vellore Institute of Technology, Chennai, India **May 2021**

Work Experience

CVS Health, *Software Engineer* New York **| Jan 2024 – Present**

- Reduced prescription query processing time by 35% by developing a React.js platform using functional components, hooks, & Redux for optimized state management, enabling faster access for healthcare providers.
- Achieved 150ms API latency during peak loads by enhancing Spring Boot REST APIs with caching & asynchronous processing, improving performance for 8,000+ daily requests.
- Designed interfaces for accessing medical & prescription data & document review, enabling PDF uploads, DCN-based searches, & API-driven highlighting, increasing data accessibility by 40% & reducing review time by 20%.
- Implemented JWT for stateless session handling, OAuth for secure external access, & LDAP for centralized user authentication, enabling secure access to 10+ healthcare applications while safeguarding patient data.
- Integrated ECS with Load Balancing, CloudWatch, & CloudTrail and automated Kubernetes pipelines, reducing MTTR by 40% & deployment time to under 15 minutes, improving healthcare query & billing efficiency by 35%.

Western Union, *Software Engineer* Hyderabad, India **| June 2022 – Dec 2022**

- Redesigned backend APIs with Spring Boot, reducing transaction processing time by 25% and enabling faster settlements for 500,000+ monthly transactions.
- Built real-time payment polling workflows using REST APIs, providing accurate transaction status updates and reducing failed escalations by 15%.
- Implemented a real-time event-streaming system using Apache Kafka, replacing batch updates and improving system responsiveness by 30%, enabling clients to access timely transaction updates for better financial management.
- Ensured API robustness by testing and optimizing with Postman, resolving bottlenecks to support 100,000+ daily requests seamlessly, and maintaining system reliability.
- Enhanced system performance with Grafana, increasing transaction completion rates by 20% by resolving high bottlenecks.

TopHat Software Technologies, *Junior Software Engineer* Remote, India **| Jan 2021 – May 2022**

- Developed a document upload system in React.js integrated with Spring Boot, reducing claims validation time by 40% from 10 to 6 minutes, improving processing efficiency for underwriters.
- Migrated legacy claims data to Amazon DynamoDB, optimizing schema models and indexing to reduce data retrieval latency to 150ms, enabling faster claims access.
- Implemented a fraud detection workflow using DynamoDB Streams and Spring Boot, reducing fraudulent claims by 20% and minimizing financial risks.
- Improved API reliability to 99.5% by debugging and optimizing claims submission workflows, ensuring smooth handling of over 1,000 daily claims

Skills & Certifications

Languages: C, C++, C#, Java, Python, JavaScript, TypeScript, SQL, Bash/Shell
Frameworks and Libraries: Spring Boot, Spring MVC, Spring Data JPA, Spring Cloud, React.js, Node.js, Redux, Streamlit, LangChain
Databases: MySQL, PostgreSQL, MongoDB, DynamoDB
Cloud and DevOps: AWS (ECS, CloudWatch, CloudTrail), Kubernetes, Docker, Jenkins
Tools: Git, GitHub, Apache Kafka, Grafana, Jira, VS Code
Testing and Security: JUnit, Mockito, Pytest, NUnit, Postman, Selenium, JWT, OAuth, LDAP
Certification: AWS Certified Cloud Practitioner | Meta Front-End Developer Professional Certificate

Projects

Repochat

- Developed an AI-powered GitHub repo chatbot, leveraging Code Llama 7B-Instruct LLM and RAG. Implemented two branches, the local version provides full control over data and processing, while the cloud version streamlines interactions through API calls via the Streamlit platform.
- Integrated Hugging Face and OpenAI embeddings. Employed Vector Database for data retrieval, and used LangChain framework.

Multivoice

- Integrated ElevenLabs voice cloning, TTS technology, and OpenAI for translation, elevating foreign-language content with personalized dubbed versions.
- Automated dubbing through Streamlit, managing JSON and MP3 inputs, fostering an immersive multilingual experience for diverse audiences.