Santhosh Chandrasekaran

Software Engineer | Full Stack Developer

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Summary

Software Engineer with a strong foundation in Full Stack Technologies, including React.js, Python, Java, and Azure DevOPS. Skilled in CI/CD automation, reusable component development, and integrating machine learning models. Focused on developing high-quality, customer-facing web and mobile applications that address real-world problems.

Education

University of California, Irvine - Masters, Computer Science

Operating Systems, Artificial Intelligence, Machine Learning, Data Structures, Advanced Algorithms

Sri Venkateswara College of Engineering - Bachelors, Information Technology

Computer Architecture, Database Management Systems, Big Data Analytics, Cloud Computing

Sep 2023 - Dec 2024

GPA: 3.77 / 4.0

Aug 2016 - May 2020

GPA: 4.0 / 4.0

Technical Skills

Programming Languages: C, C++, Java, Python, JavaScript, TypeScript

Frontend Development: HTML5, CSS3, React.js, Next.js, Angular.js, Material UI, Shadon, Bootstrap, Tailwind CSS

Backend Development: Flask, FastAPI, Node.js, PostgreSQL, MySQL, MongoDB, NoSQL **Machine Learning:** TensorFlow, Keras, OpenCV, Tesseract, Pandas, GAN, RAG, Matplotlib

Other Technologies: Docker, Azure DevOps, AWS (S3, SageMaker, CodePipeline, CodeBuild, CodeDeploy), Jenkins, Git, Redis

Experience

Mage Data June 2024 - Dec 2024

Software Developer Intern - Python, TensorFlow, Keras, Matplotlib, PostgreSQL

New York, USA

- Built a Synthetic Data Generation Model using GANs, achieving an accuracy of 83% for generating realistic synthetic data
- Improved model accuracy by 45% by integrating Label Encoding and Min-Max Scaling for efficient data pre-processing
- Utilized PostgreSQL to manage data retrieval and store results, enabling structured analysis of synthetic data outputs
- Visualized demographic distribution using **Matplotlib**, creating graphs to validate and analyze the distribution against original data

Aspire Systems Dec 2020 - July 2023

Senior Software Engineer - Java, Maven, JavaScript, ReactJS, Redux, Azure, Jenkins, MySQL

Chennai, India

- Led development of 10+ web and mobile modules, improving usability by 75% for the banking application serving 2M+ users
- Coordinated client-facing Agile meetings, driving team progress and delivering high-quality software solutions on schedule
- Orchestrated CI/CD pipelines using Jenkins and Azure DevOps, automating and reducing deployment processes by 40%
- Developed reusable frontend Reactjs and Redux components, cutting development time by 30% across all projects
- Optimized backend APIs using Java and Spring Boot, integrating Spring Data JPA and Redis, supporting 1M+ requests daily with 93% uptime

Temenos (Contracted by Aspire Systems)

May 2021 - Sep 2022

Software Engineer - Java, SpringBoot, JavaScript, ReactJS, REST API, MySQL, AWS

Hyderabad, India

- Resolved 100+ bugs across multiple projects, improving application stability and efficiency by 20%
- Refined backend APIs using Java and Spring Boot, reducing API response times by 20% and resolving critical issues like settings updates and profile data loss
- Followed SDLC processes, ensuring timely delivery of features resulting in 95% on-time feature releases
- Reduced deployment processes by 45% through automated CI/CD pipelines using AWS CodePipeline, AWS CodeBuild, AWS
 CodeDeploy, ensuring faster and reliable releases across production environments

Project

VISTA (Sponsored by Amazon Web Service (AWS))

Jan 2024 - June 2024

React.js, Python, Amazon (SageMaker, S3), Redis, RabbitMQ, Dramatiq, MUI

- Developed the UI with React.js, Material UI, and Tailwind CSS, improving user experience and responsiveness
- Built FastAPI backend APIs to connect with Amazon S3, speeding up data retrieval
- Integrated OpenCV and Tesseract for text extraction from video frames, improving data accessibility.
- Engineered a scalable video analysis pipeline using OpenAl Whisper and LLaVA 1.3, enabling real-time transcription on Amazon SageMaker
- Created a chatbot using a RAG model, providing accurate, timestamped responses and enhancing user engagement