SANTOSH KUMAR POTTUMUTHU

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Professional Summary

Innovative Software Engineer with over 3 years of experience in backend development, microservices architecture, and cloud-based deployments. Proficient in Java, Spring Boot, and AWS, with proven expertise in optimizing system performance, automating workflows, and building scalable solutions. Seeking to leverage expertise in backend engineering and machine learning applications to deliver high-performance enterprise solutions.

Education

Master of Science in Computer Science | Fall 2023 – Spring 2025 | University of Georgia, Athens, GA | CGPA: 4.0/4.0
Course Work : Algorithms, Database Management, Computer Networks, Machine learning, Secure Programming with Rust, Data Mining, Software Engineering and RedTeaming of LLMs.

Bachelor of Technology in Computer Science | May 2022 | Lovely Professional University, India | CGPA: 8.99/10
Course Work : Programming In Java, Python, C++, Data Structures, Operating Systems, Database Management and Big Data.

Skills

Languages : Java, Python, JavaScript, TypeScript, Rust, Bash Scripting

Back-end : Spring, Spring Boot, Flask, Node.js

Front-end : HTML, CSS, Angular, React.js, Tailwind CSS

Tools/Applications : Git, Docker, Jenkins, Apache Kafka, Redis ,Linux, Maven

Database : MySQL, PostgreSQL, MongoDB

Cloud : AWS**,** GCP

Project Management : Scrum, JIRA

Other Skills : Strong Debugging and troubleshooting skills, Data structures & Algorithms, UNIX, Kubernetes, CI/CD

Work Experience

Technical Research Engineer - Brain and Action Lab, UGA | Feb 2024 - Present
- Engineered efficient code refactoring strategies for NFS and vbRSA, resulting in a decrease of technical debt by 60% and enabling the team to implement new features 2x faster than before..
- Demonstrated expertise in code refactoring through ongoing contributions to core projects like NFS and vbRSA.
- Accelerated development speed by 40% through migrating complex legacy MATLAB scripts to Python, significantly enhancing code maintainability and reducing execution time by 25%
- Developed and maintained Linux scripts to automate job execution for machine learning projects, improving workflow efficiency.

Software Development Engineer - MoveInSync Technologies, Bengaluru, India | April 2021 - July 2023
- Developed a trip and vehicle monitoring dashboard to identify the status of electric vehicles (EVs) and automatically allocate vehicles to trips based on the Distance to Empty (DTE) and total trip distance, reducing vehicle downtime by 30% and improving trip allocation efficiency by 25%.
- Directed the migration to a microservices framework, enhancing development efficiency by 50% and cutting deployment time by 60%, leading to a 20% increase in user satisfaction related to downtime.
- Enhanced system performance by optimizing SQL queries and refactoring inefficient code segments, resulting in a 25% increase in application speed.
- Managed JIRA tickets and participated in Agile ceremonies, including sprint planning, daily stand-ups, and retrospectives, to ensure timely resolution of issues, smooth project progression, and effective team collaboration.
- Java, Spring Boot, AWS, PostgreSQL, Kafka, Redis, Maven, Linux, Docker, Jenkins, Prometheus

Projects

- **Schedule-ease :** Developed an automated scheduling assistant to streamline resource management and reduce manual scheduling efforts for teams managing time-sensitive appointments and tasks..
  Tech Stack: SpringBoot, Java, ReactJs, PostgreSQL, AWS, Docker
- **Real-Time EV Cab Allocation and Trip Dashboard:** Developed a Spring Boot web application to collect TCU data, provide real-time vehicle allocation recommendations, and generate trip history for an EV dashboard.
  Tech Stack: Java, Spring Boot, PostgreSQL, and JavaScript.

Certifications

AWS Certified Solutions Architect – Associate	- *April 2021*
AWS Certified Developer – Associate	- *May 2021*

Achievements

● **Falcon Award - "Fire In the Belly"** : Recognized as the top performer of the year at MoveInSync Technologies - **2022**

● Achieved first place in the company-wide Tech Hackathon for implementing an efficient deployment system for EV   cabs and an intuitive EV trip view dashboard. - MoveInSync - **2022**