Sai Kowshik Ananthula

Github LinkedIn Portfolio

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Summary

Experienced Software Engineer and Research Assistant with expertise in design, development,and deployment of software applications using Java, J2EE technologies and CI/CD piplines. Skilled in developing applications with React, Spring Boot and working with databases such as MySQL, PostgreSQL, and MongoDB. Proficient in AWS, and Airflow, with a strong understanding of design patterns such as MVC, Singleton, Factory, and Observer.

Education

Master of Computer Science, Georgia State University, GPA: 3.9 — August 2021 – May 2023
Bachelor of Computer Science, GITAM University, GPA: 3.9 — June 2017 – May 2021

Technical Skills

Languages: Python, C, C++, SQL, Dart, JAVA, JavaScript, HTML5, CSS, XML.
Frameworks: Spring Boot, Flutter, React.js, DEVS Java, REST Api, Airflow, Mockito.
Developer Tools: Git, Docker, GCP, VS Code, Visual Studio, PyCharm, IntelliJ, Eclipse, Android Studio, AWS, GIT, Microsoft Office, Jenkins, Gradle, YAML, MySQL, JSON.
Software Development Skills: Agile, Scrum, Test-driven development, CI/CD, Data structures, Algorithms, Design patterns, Junits, Sonar, Software Development Life Cycle (SDLC).

Experience

Software Engineer I — January 2023 – Present
Global Payments Inc — *Columbus, GA*
- Facilitated client transaction pipelines from mainframe utilizing Airflow DAGs, Kubernetes, and Docker, resulting in 30% efficiency in batch-processing.
- Formulated and deployed postingConfigs API (back-end), Taxon(front-end) using react js, spring boot, EC2, S3, REST Api, java and hosted in AWS.
- Collaborated with Visa and Mastercard clients in stationing edit packages and optimizers on EC2 instances.
- Designed POJOs and DAOs for database entities furnishing Spring JDBC annotation mappings.
- Debugged web services by root cause analysis, including Error Handling, Parsing issues, and facilitated CI/CD using Jenkins, JIRA, and GitHub, and tested using SOAP UI, and Postman.
- Assisted in developing documentation, peer code review, and cooperated with DevOps in resolving production issues.

Software Engineer Intern — June 2022 – August 2022
Global Payments Inc — *Alpharetta, GA*
- Developed and tested the Correspondence API to help client users fetch account details using Java and Spring framework, following Agile Scrum development sprints.
- Collaborated with Rest APIs design and constructed utilizing the SpringBoot MVC Framework and Java features including Collections Framework, Exception Handling, I/O System, Multi-Threading, and JDBC.
- Constructed Spring components such as Controller, Validator, Resource Mapping using annotations to handle requests, built custom view templates, and devised Unit and Integration tests leveraging JUnit and Mockito.
- Developed original and creative technical solutions to on-going development efforts, designing and coding applications following specifications using the appropriate tools and adhering to the company's coding standards.

Graduate Software Engineer (Teaching + Research) — August 2021 – May 2023
Georgia State University — *Atlanta, GA*
- Conducted experiments to enhance automobile safety using object detection and IoT sensors, resulting in a 30% reduction in overall system power using Python, JavaScript, SQL, and Java.
- Designed a collision detection algorithm that performed 80% more efficiently than current models and published an IEEE paper on visual light communication, generating 1.6 million in revenue for M.O.R.S.E studio development.
- Developed a Python script to automate assignment management, reducing evaluation time by 95% using REST API.

Projects

GSU ThingsBoard | *Python, Flutter, Raspberry Pi, PostgreSQL, Kafka, Rest Api*
- Devised a cross-platform mobile and web application to visualize, control, and communicate between all IoT devices across the GSU Network which assisted in collecting radon gas data from IoT devices 70% more efficiently.
- Visualized device data to show activity status and triggered alarms, saving 10% of investment on IoT devices.

Multi-Storey Parking lot | *DEVS Java, Gradle, Git, Design patterns*
- Developed a multi-story parking lot system simulation and analyzed more than 20 scenarios, suggesting best practices to organize traffic and reduce wait times by 40%.
- Implemented the Abstract Factory design pattern in DEVS Java framework using Object-Oriented Programming.
- Created a queuing algorithm using linked lists and DEVS Queue that maximized organizing efficiency by 60%.

Database Hits Optimizer | *Python, MongoDB, Redis, SQL, NoSql*
- Designed an algorithm combining Redis cache with MongoDB and PostgreSQL, reducing database hits by 60%.
- Implemented querying on SQL and NoSQL, populated with the Twitter dataset, improving turnaround time by 80%.
- Assessed the performance of cache combinations with databases, and visualized load characteristics on indexing.