Sai Kowshik Ananthula

Github LinkedIn Portfolio

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Summary

Software Engineer and Research Assistant with 1+ years of expertise in design, development,and deployment of software applications using Java, J2EE technologies and CI/CD pipelines. Proven track record of 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. Awarded as "Over Achiever" and merit scholarship of 80,000 dollars among 3000 students.

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, 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 — January 2023 – Present
Global Payments Inc — *Columbus, GA*

- Engineered a highly efficient client transaction pipeline system utilizing Airflow DAGs, Kubernetes, and Docker; achieved 60% increase in batch-processing efficiency, leading to better productivity and faster transactions.
- Architected and launched back-end API and front-end UI using React JS, Spring Boot, EC2, S3, and REST Apis in AWS, Elevated scalability and robustness of the mainframe pipeline by 80%.
- Collaborated with Visa and Mastercard clients in stationing edit packages and optimizer on 10+ AWS EC2 instances.
- Created POJOs and DAOs for 80+ 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; reduced customer support issues by 40% and improved system stability.
- Implemented a streamlined documentation process, reducing errors and improving cross-functional collaboration by 40%.

Software Engineer Intern — June 2022 – August 2022
Global Payments Inc — *Alpharetta, GA*

- Developed and optimized the Correspondence API leveraging Java and Spring framework, resulting in a 40% reduction in account lookup time for client users and improved overall system response, following Agile Scrum development sprints.
- Engineered REST APIs by Spring Boot and Java features Collections Framework, Exception Handling, I/O System, Multi-Threading, and JDBC, resulting in 60% system efficiency and integration with external services.
- 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 Mockitos.

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.
- Innovated a collision detection algorithm that performed 80% more adeptly 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 dexterously.
- 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*

- Pioneered 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%.
- Facilitated querying on SQL and NoSQL, populated with the Twitter data set, improving turnaround time by 80%.
- Assessed the performance of cache combinations with databases, and visualized load characteristics on indexing.