Siddhesh Shinde

SKILLS

Languages : C++, Java, Python

Technologies: SpringBoot, AWS, MERN, SQL (PostgresSQl, MySQL), Git/Github

Systems Core: OS, DBMS, CN, COA

WORK EXPERIENCE

MorningStar, India

Associate Software Engineer (July 24' - July 25')

- Worked on **implementing and optimizing data transfer pipelines** using Python, Terraform and AWS services (Lambda, Redshift), reducing data processing time by 30%.
- Assisted **development of Python-based automation scripts** for SQL query generation and QA testing flow resulting faster development of SQL scripts for data pipeline.
- Improved SQL procedures with different approaches, leading to a 25% efficiency in query processing time.
- Implemented Unit Testing of Lambda Functions in Python for ETL data pipelines with 85% code coverage.

PROJECTS

PhotonDB

- A high-performance in-memory **NoSQL database** server written in C++17 and state-of-the-art MCP server enabling low latency and **natural-language interactions** with the database.
- Supports core DB operations via terminal, with additional support for interaction through any LLMs (e.g. ChatGPT, Claude, Cursor) over the **MCP protocol.**
- Implemented HashMap and AVL tree from scratch for efficient data management and retrieval.
- Tech used : C, C++, CMake(for build), Python(MCP)
- Project Link: github.com/s1ddh3sh/PhotonDB

RailEase

- A railway ticket booking website inspired by Indian UTS designed for seamless ticket booking across the Mumbai local train network.
- Used a greedy approach of Djikstra's algorithm for ticket cost calculation, Spring Boot MVC, DTO pattern,
 PostgreSQL for database, etc
- Implemented Docker containerization and microservices using docker-compose, custom exception handling, logger, unit testing, etc
- Tech used : Java SpringBoot, Angular, PostgreSQL
- Project Link : github.com/s1ddh3sh/RailEase

EDUCATION

VIDYALANKAR INSTITUTE OF TECHNOLOGY (2021-2024)

BE in Information Technology (CGPA: 9.47/10)

S.V.JOSHI JUNIOR COLLEGE (2018 – 2020)

HSC (Class XII)- Percentage: 92.31%

ACHIEVEMENTS

- GATE AIR-1061
- · Black Belt in Karate