

SAYANJIT MUKHERJEE

GITHUB - [THEDROGON](#)



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PROJECTS

Blog-Bish- Microservice-based Blogging Platform

Tech Stack: Go, PostgreSQL, Redis, Docker, Docker Compose, Prometheus, Grafana, JWT.

- Developed a scalable microservice-based blogging platform in Go, delivering reliable Restful API that support 100+daily requests with 99.9%up-time, improved by optimized PostgreSQL queries and Redis caching
- Improved application performance by 40% by optimizing database queries with PostgreSQL and implementing Redis caching, reducing average response time from 800ms to 480ms.
- Implemented rate limiting and input validation on API end points, preventing over 100 malicious requests per day and safeguarding the application from potential security vulnerabilities.

Real Time Brand Sentiment pipeline

Tech Stack: Python, Kafka, Docker, Stream lit.

- Engineered a real-time data pipeline with Kafka, processing over 1000 social media posts for live sentiment analysis.
- Deployed a Stream lit dashboard visualizing sentiment insights with a data refresh latency of under 5 seconds.
- Designed a scalable microservices architecture using Docker and Kafka to ensure high fault tolerance and system reliability.

End-to-End Customer Segmentation Pipeline

Tech Stack: Python, Py-Spark, Pandas, Scikit-learn, Fast-API.

- Designed a batch ETL pipeline using Py Spark to clean and transform raw e-commerce data, saving the structured output as a Parquet file.
- Applied K-Means clustering with Scikit-learn to analyze RFM data, identifying 4 distinct customer segments based on purchasing patterns.
- Developed a simple REST API using Fast API to serve the trained model, creating an endpoint to classify new customer data.

EDUCATION

Bachelor's degree

Asansol Engineering College.

2022 – 2026

Grade – 7.94

SKILLS

- **Languages:** Python, Golang.
- **Monitoring:** Prometheus, Grafana.
- **Databases:** MySQL, Postgres.
- **Developer Tools:** Docker, Git, GitHub.

ACHIEVEMENTS

India at College level Secured 5th position in Smart.

PROFESSIONAL DEVELOPMENT

Course/Workshop

- DataCamp – Data Scientist track 2025
- DataCamp–Python fundamentals
- DataCamp – Data Engineering.