JOEL PETER DSOUZA

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I am a **Full Stack Developer**, an **open-source contributor**, and a **tech blogger** with an avid interest in new technologies. I always strive to architect and implement the best solutions.

PROFESSIONAL EXPERIENCE

Ather Energy, Bengaluru, India

Aug 2021 – Present

Full Stack Developer (Charging Infrastructure Team)

- Led the development of various **microservices** with **Spring Boot** and **Kafka** adhering to **SOLID principles**, which managed and monetized vehicle charging sessions.
- Worked and documented concepts like SOLID Principles, Trunk-based development and OOP Design Patterns.
- Built an Alerting Pipeline using Spring boot and Kafka Streams processing over 100 million events daily, ensuring faster reaction to production issues through strategic alerts.
- Re-architectured and automated the Usage Report Generation pipeline, resulting in an **82% performance increase** with decreased costs and increased scalability.
- Set up application profiling for Spring and Node using Prometheus with PQL and Grafana.
- Built NextJS and React/Redux applications with Unit Tests using RTL and Jest and monitoring using Google Analytics.

Blubirch, Bengaluru, India Software Developer

July 2019 - July 2021

EDUCATION

Manipal Institute of Technology, Manipal, Karnataka

2015 - 2019

B.Tech in Computer Science Engineering

TECH STACK

Languages: Java 8/17, TypeScript, JavaScript **Databases**: Postgres, Clickhouse, Redis

Frameworks: Spring Boot, NextJS(ReactJS), Node.js **Other**: GCP, Kafka, Kubernetes, Docker, Mockito, Jest

PROJECTS

Charging Infrastructure Microservices Spring Boot, AWS IoT, Postgres, Kafka, Redis

- A set of microservices deployed on Kubernetes GCP that handles the business logic and management of charging sessions for users.
- Used SOLID Design principles along with Strategy Design Pattern to ensure a clean and extendable code base.
- Set up logging with Log4J with Kibana and Filebeat on ElasticSearch.
- Set up application profiling using Micrometer, Prometheus and Grafana.
- Set up Unit Tests and E2E Testing using Mockito and H2 Database.

Usage Report Microservices

Nest.js, BullQueue, Postgres, Clickhouse, Airflow

- An E2E pipeline that involves an ELT process of over **35 million trips**, to generate reports and a set of microservices to send reports to over **100,000 user**s every month.
- A set of microservices written in Nest.js, which fetch reports, generate PDFs and send Emails coordinated by Bull Queues running on Redis.
- Completely automated, with the ability to scale easily over an ever-increasing customer base and exponential increase in trip data until now, with reduced costs due to high compression rates of Clickhouse and improved performance due to the OLAP nature of Clickhouse.