

SAROJ KUMAR

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WORK-EXPERIENCES

Mercedes-Benz Research & Development India

September '2022 - Present

Bangalore, (HYBRID Mode)

Profile: Python Developer

- Built and maintained FastAPI endpoints and models to improve how internal services fetch and serve data – helped speed up responses and clean up the old API structure.
- Developed a backend service in Python and gRPC to make data handling more consistent across different systems for the data team.
- Implemented a service to track ingestion processes using Google Cloud (GCP) Pub/Sub, ensuring efficient and reliable data processing.
- Integrated Flyte to orchestrate and manage reproducible workflows, enhancing the automation and reliability of data processing pipelines.
- Developed Python scripts to perform analytics on the recorded data for the autonomous driving system. [Types of data: parquet, protobuf, hdf5, xml, json, csv, pandas, numpy, pyarrow]
- Worked on Optimization and Refactoring of code base by enforcing and introducing few design patterns like SOLID, Factory, multiprocessing to reduce the overall runtime execution in some modules of the application and total development time for any new feature.
- Test & Infra (CI) - Wrote Unit tests and Integration tests using pytest
- Optimised the CI/CD pipeline by improving the test coverage, pre-commit-hooks, blackduck, sechub, pylint and pydocs

NOKIA Solutions and Networks India Pvt. Ltd

July '2020 - September'2022

Bangalore, WFH Mode

Profile: R&D Engineer

- Developed and implemented authentication module using Flask, focusing on user registration, login, logout.
Tech stack: Python3, Flask, MongoDB, FastAPI, AWS, System Design.
- Developed features related to database like purging of old files.
- Refactored and upgraded code base from Tensorflow 1 to 2 using automated scripts

Profile: DevOps Engineer) July'20 - July'21

- Developed scripts to parse error files by utilizing Python **re** module
- Added blackduck, sechub scan, pre-commit-hooks, build and deploy stages to GitLab. Yml
- Integrated SonarQube in Jenkins to automate code quality-analysis
- Modifications to Docker file, Jenkins file
- Scheduling, Monitoring and Troubleshooting of CI/CD pipelines
- Allocation, Deallocation & Migration of cloud labs, keeping the snapshots, Maintaining the Healthy state of labs
- Worked on Preserving stable builds and Publishing of artifacts and Delivery of final software to customer server

SKILLS

• Languages:

Python (Advanced) Java C++

• Frameworks & APIs:

FastAPI Flask REST API
gRPC Asyncio SQLAlchemy
web-sockets Oauth, JWT

• Databases:

PostgreSQL MySQL MongoDB

• DevOps & Cloud:

Git Linux Docker Kubernetes
Jenkins Gitlab CI AWS (EC2, S3)
GCP (gcs, Pub/Sub, IAM)

• Workflow Orchestration:

Flyte

• Software Engineering:

Data Structure and Algorithm
Distributed Systems graphQL
Multiprocessing & Multithreading
Design Patterns Kafka, Redis

CODING HANDLES

- LeetCode: <https://leetcode.com/joras/>
- HackerEarth: <https://www.hackerearth.com/@saroj41/>
- GeeksForGeeks: <https://www.geeksforgeeks.org/user/saroj%20kumar/>
- Codechef: https://www.codechef.com/users/saroj_123/

EDUCATION

NIT, Jamshedpur

BTech (Computer Science Engineering)

Aug 2016 - May 2020

- Qualified 'Tata Cummins Scholarship Program 2018'
- Qualified 'National Merit-Cum-Means Scholarship Exam 2011'