RUTIKA KSHIRSAGAR

Email: rutikakshirsagar1212@gmail.com

Phone: 7774974329

LinkedIn: www.linkedin.com/in/rutika-kshirsagar-009289185 Languages: English (Business-level), Japanese (Business-level)

SKILLS

Robotics

ROS2 | SLAM Parameter tuning

• Embedded Systems

Jetson Orin Nano | Intel Realsense D435 | IMU sensor(MPU 6050) | Node MCU

• Programming Languages

Python | C++

Software tools

Gazebo | Rviz

Devops

Docker | Linux | Shell Scripting | Git | AWS Cloud

ETL tools

Snowflake | Ab Initio

EDUCATION

B.TECH. ELECTRONICS

Kolhapur Institute of Technology College of Engineering, Kolhapur

Year of Graduation: 2022

Grade: 9.42

PROFESSIONAL EXPERIENCE

AEROBOTIX TECHNOSOLUTIONS

Associate Engineer Feb 2025- Present

Autonomous navigation system:

- Developing an autonomous navigation system using Jetson SBC and Intel RealSense D435 camera.
- Established hex encrypted TCP/IP communication IMU sensor and controller.
- Created Docker file removing compatibility issues, established host-container networking.
- Using RTAB-Map SLAM and Realsense D435 camera generated a 3D map of environment.
- Implemented ROS pub-sub, client-server, and custom interfaces, applied SLAM algorithms and sensor fusion techniques for mapping and localization.
- Created a URDF file to model for robot simulation.

HEXAWARE TECHNOLOGIES

Software Engineer July 2022 - Feb 2025

Citi Bank

- Worked as a Data Engineer in Business Intelligence and Analytics, responsible for analysis, development, and enhancement of Ab Initio graphs.
- Resolved production incidents as part of L3 support, developed shell scripts to automate processes.
- Utilized Autosys for efficient job scheduling, calendar creation and management of data workflows.
- Created ETL-Checklist for the development team reducing the work hours and minimizing the development errors.
- Automated the manual pre-post validation process which is standardized process from the client-side, using Ab Initio components as part of CVA.

Snowflake COE team

- Designed and implemented a data pipeline from AWS S3 to Snowflake using Snowpipe, data metric functions, and alert notifications.
- Configured AWS IAM roles, access policies, and SNS triggers for real-time Snowpipe ingestion, Iceberg tables, and data quality monitoring.
- Built a multi-layer Snowflake architecture: Landing (raw data), Silver (transformation via Streams, Tasks, Stored Procedures), and Gold (enriched datasets with Dynamic Tables & Materialized Views).
- Developed a Document AI pipeline for data extraction, RAG model for support ticket analysis and issue tracking, Data Lineage, and Data Metric Functions for financial insights.
- Built a Streamlit app for Cortex Analyst with advanced data visualization using semantic models and Cortex Search Service.
- Designed Snowflake architecture for a medical diagnosis chatbot.
- Created Hexalerate, a Snowflake metadata ingestion framework with OAuth authentication, parameterized Python engine, and automated job execution.

MENON AND MENON LTD.

Graduate Engineer Trainee March 2022 - July 2022

- Worked in IT Department understood about datacenter infrastructure, operations, monitoring.
- Contributed to YOLO-based system for tracking ensuring safety compliance on the manufacturing line.
- Understanding of PLC's.
- Studied on how to efficiently manage manpower of the company and thus increase the production rate.

ACHIEVEMENTS & AWARDS

- NAT 3Q
- AWS Cloud Practitioner
- SnowPro Core