

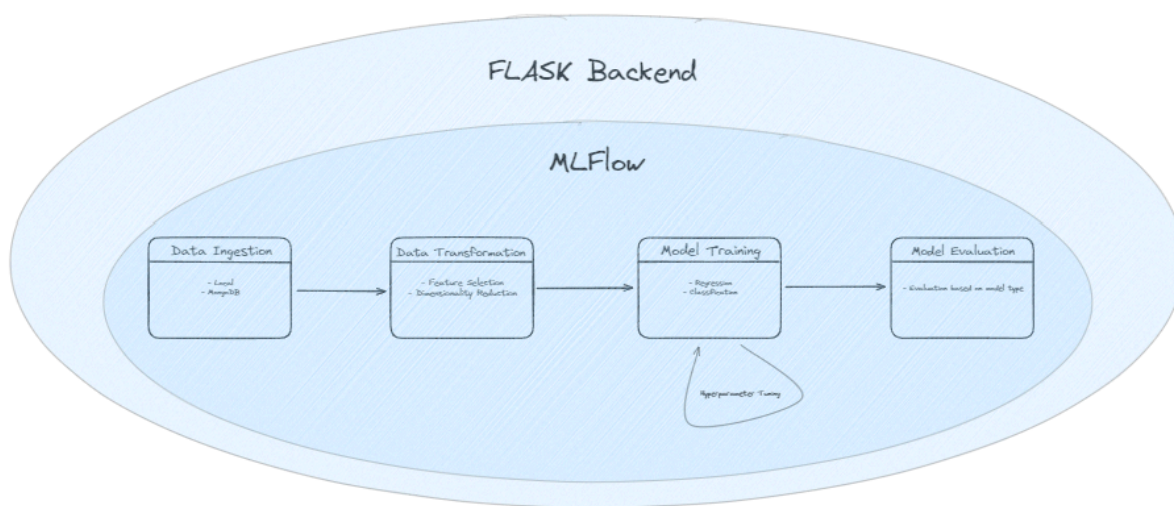
PWSkills
Architecture
Industrial Automation Internship Report



Automated Machine Learning

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Architecture



Architecture Details

The project aims to automate machine learning model pipeline. This involves data ingestion, transformation, training, and evaluation. Then for interaction with users, the project has an api developed in flask.

System Overview

- Data Ingestion: Inputs (e.g., data sources), processing logic (e.g., file copying, data validation), and outputs (e.g., saved data path).
- Data Transformation: Detailed transformations like handling missing values, encoding, normalization, etc.
- Model Trainer: Supported algorithms, hyperparameter options, training logic, etc.
- Model Evaluation: Evaluation metrics, logging to MLflow, etc.
- Prediction Pipeline: How predictions are made using trained models.

Technologies Used

- Python
- MLFlow
- Scikit-learn
- Numpy
- Pandas
- Flask