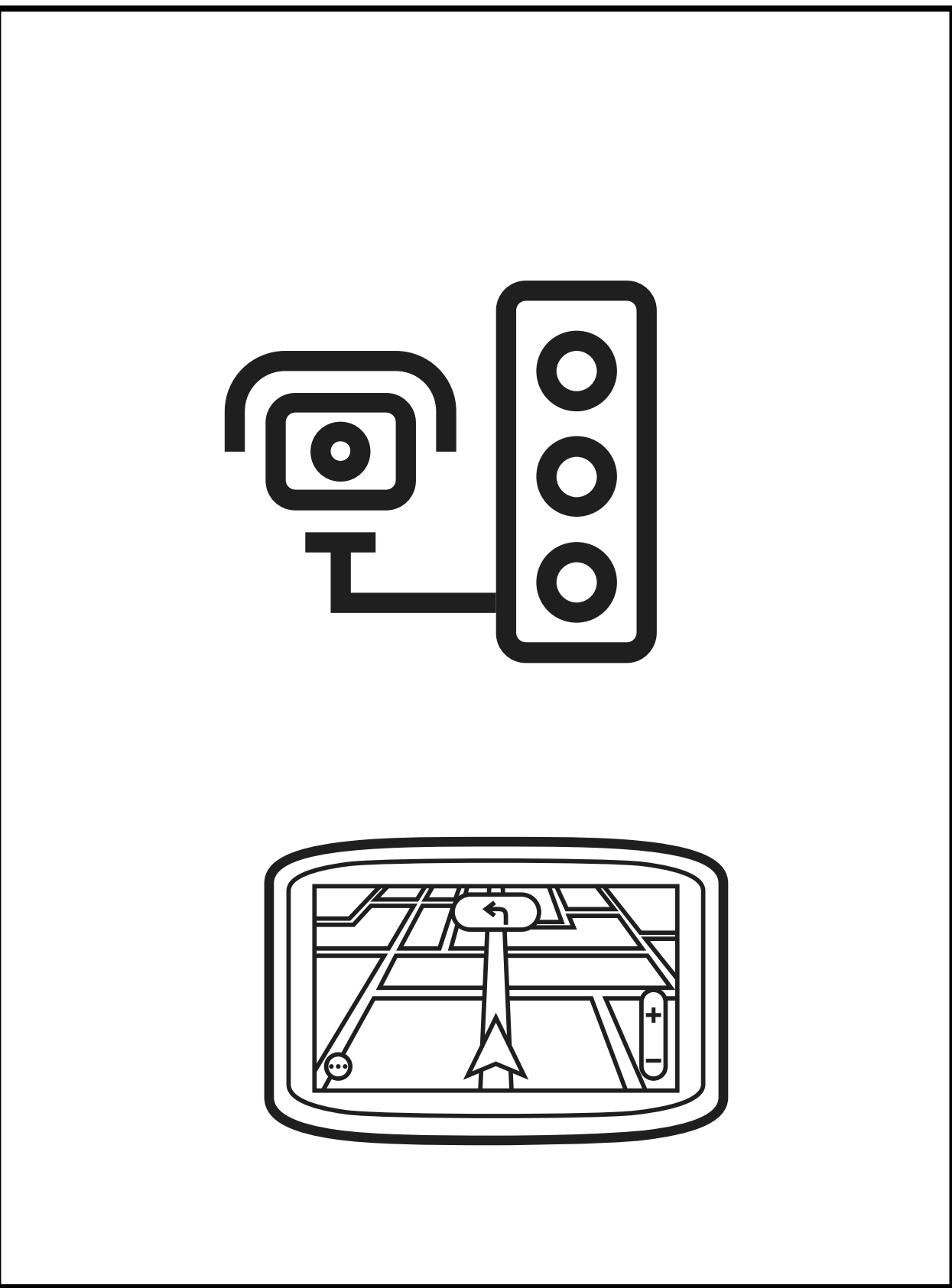


Data Collection



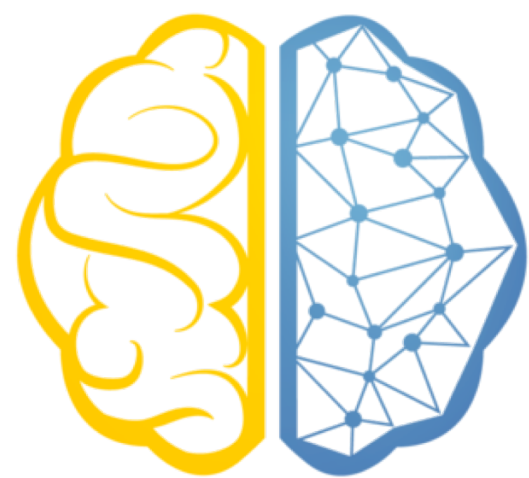
The collected data is stored in Amazon S3

The raw traffic data is preprocessed to remove any noise or outliers and to convert it into a suitable format for machine learning.

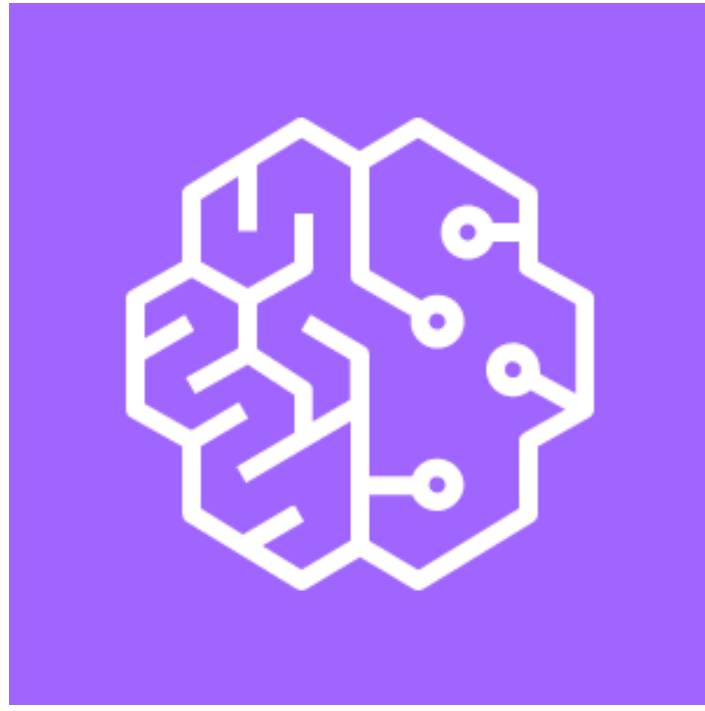


AWS Glue

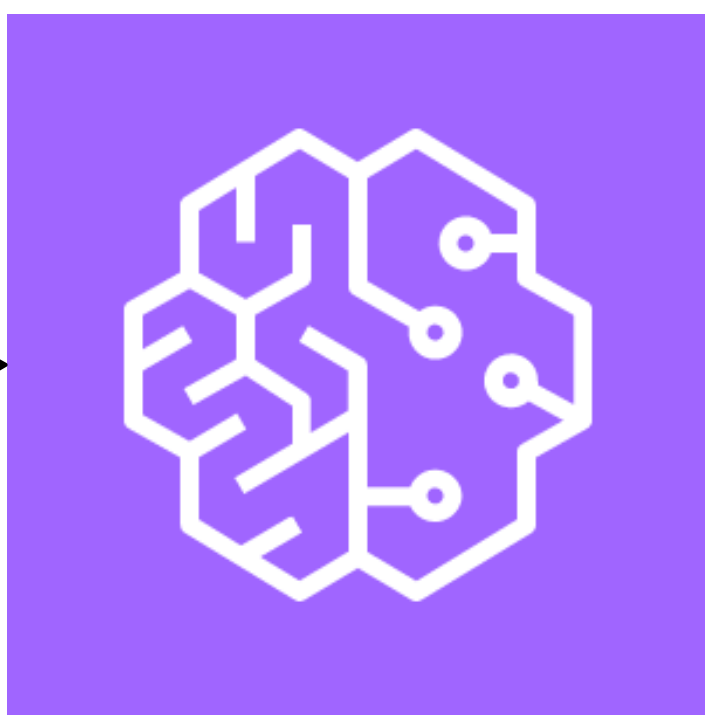
The preprocessed data is used to train a machine learning model.



Machine Learning Model



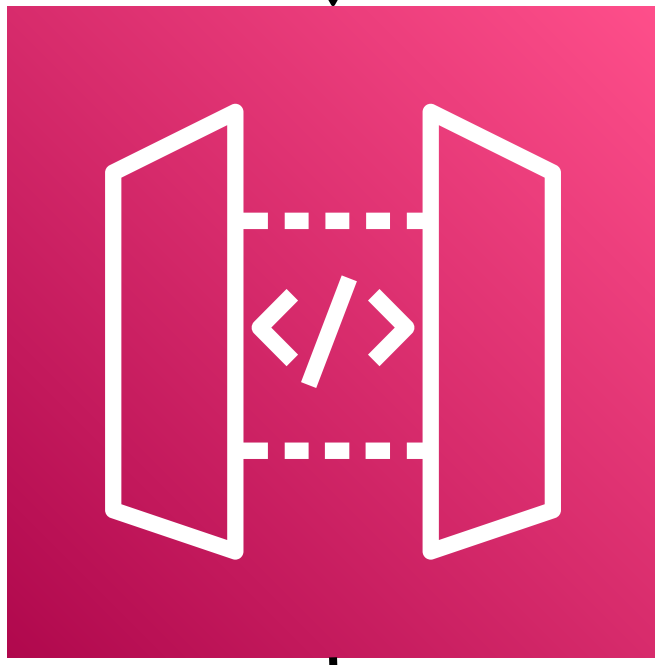
AWS Sagemaker



AWS Sagemaker Endpoint

The deployed model can handle real-time traffic volume estimation requests.

User requests for traffic volume estimation are sent to the deployed model via API Gateway.



API Gateway

The estimated traffic volume results can be visualized using Amazon QuickSight



Amazon QuickSight

Data Preprocessing

Model Training

Model Deployment

Real-time Traffic Volume Estimation

Data Visualization