**Write a paragraph about your experience of working with the standard ML pipeline in your own words.**

Working with the standard machine learning (ML) pipeline has been an insightful and structured experience. The pipeline typically involves several key stages: data collection, preprocessing, model selection, training, evaluation, and deployment. Starting with data collection, it’s crucial to ensure the quality and relevance of the dataset. Preprocessing often requires handling missing values, normalizing data, and encoding categorical variables, which is essential for model performance. Model selection is an interesting phase where various algorithms, like decision trees, SVMs, or neural networks, are chosen based on the problem at hand.

It is beneficial to look at the stages which many data science teams go through to understand the benefits of a machine learning pipeline. Implementing the first machine learning models tends to be very problem-oriented, and data scientists focus on producing a model to solve a single business problem, for example, classifying images.

A machine learning pipeline is a way to codify and automate the workflow it takes to produce a machine learning model. Machine learning pipelines consist of multiple sequential steps that do everything from data extraction and preprocessing to model training and deployment.

For data science teams, the production pipeline should be the central product. It encapsulates all the learned best practices of producing a machine learning model for the organization’s use-case and allows the team to execute at scale. Whether you are maintaining multiple models in production or supporting a single model that needs to be updated frequently, an end-to-end machine learning pipeline is a must.