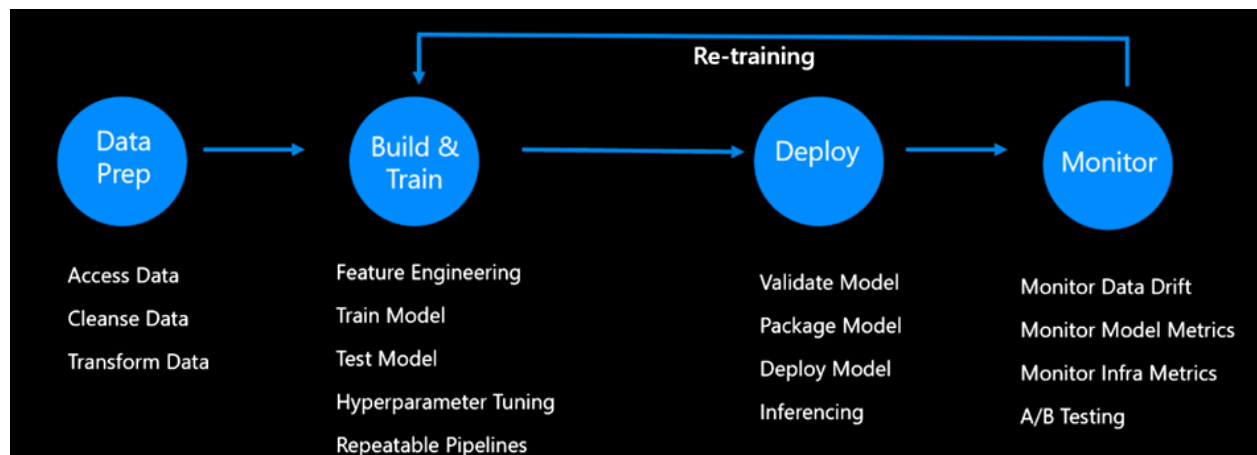# A Practical Introduction to Machine Learning Operations (MLOps)

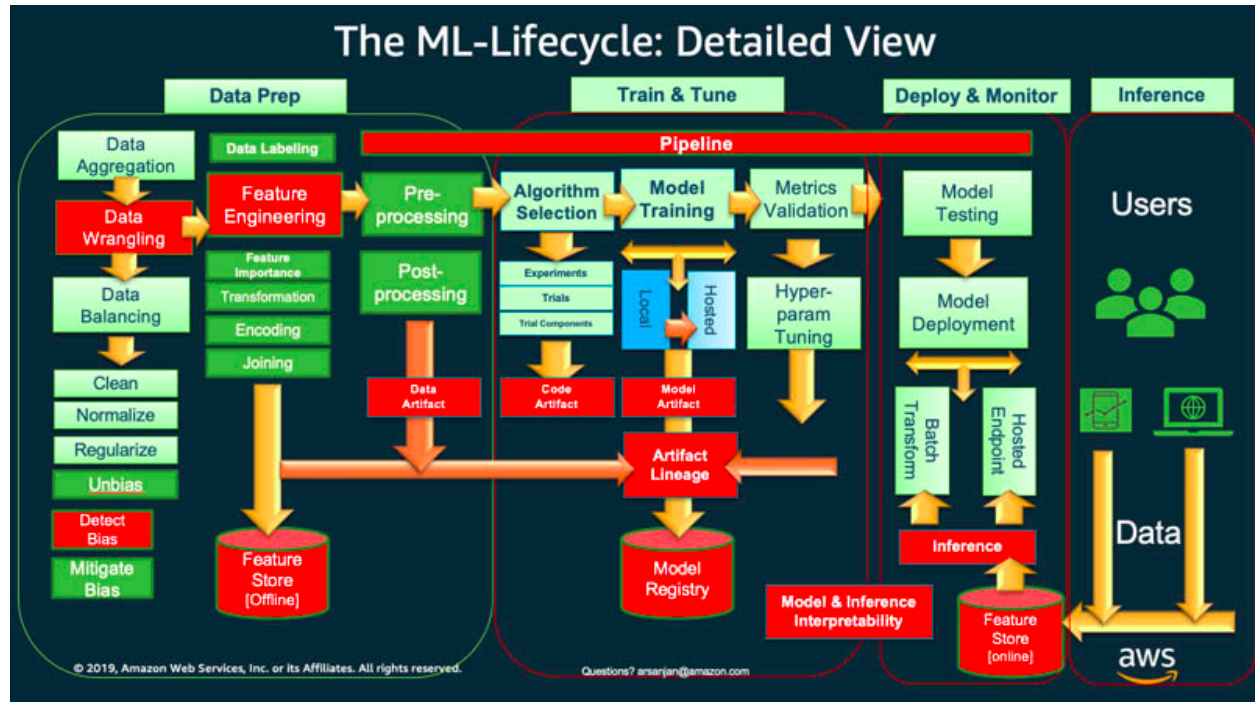**Informal definition**: "Everything that needs to be done once you have a prototype of an ML model to get that model into production and to maintain it. So the modeling adds value to your organization."

Industry perspective: A vital and growing field without which big parts of machine learning, AI, and data science wouldn't make any impact. Whether you will be an MLOps specialist or not, it will be immensely helpful to be familiar with it.

MLOps pipeline (simple version)

MLOps pipeline (more advanced version, which is still simplified)

The main MLOps frameworks

While there are many frameworks, these are the most commonly used 4. The linked websites are resources to learn about each specific framework:

GCP: What is MLOps?
AWS: What is MLOps?
Azure: MLOps: Model management, deployment, and monitoring with Azure Machine Learning
Databricks: MLOps

A comparison of the 3 leading ones: GCP, AWS, Azure

MLOps vs LLMOps

MLOps vs LLMOps: Microsoft's take
FMOps/LLMOps: Operationalize generative AI and differences with MLOps

MLOps certifications

DataCamp's perspective

Additional resources

General: Chip Huyen's [MLOps Guide](#). While she has not updated the guide as much as she used to, this is still a good collection of resources. Her book is also very useful.

Databricks' [Take your ML projects from planning to production](#) and [MLOps for Dummies](#)

Tutorials

[Set up your Production Machine Learning architecture in under two hours (AWS)](#)
Evidently AI: [How to stop worrying and start monitoring your ML models: a step-by-step guide](#)
    Google Colab direct [link](#)
    Jupyter notebook on the class' Github [page](#)