AZURE MACHINE LEARNING SERVICES

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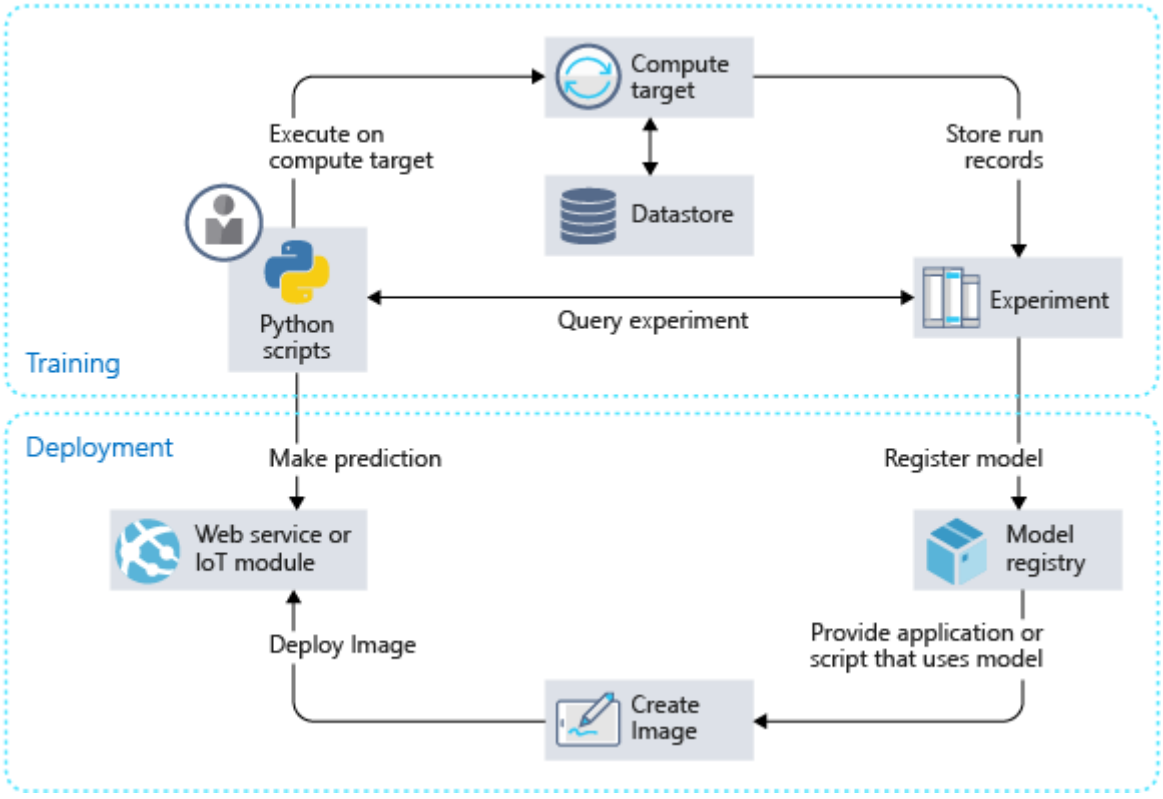
AZURE MACHINE LEARNING SERVICES

https://docs.microsoft.com/en-us/azure/machine-learning/service/

Azure Machine Learning Services Architecture



- https://docs.microsoft.com/en-us/azure/machine-learning/service/concept-azure-machine-learning-architecture

Your Azure Portal for the duration of this class

- https://portal.azure.com/#@divergenceone.onmicrosoft.com
- `az account set --subscription 3c3bb71f-3a4c-436f-9e0a-7407d75a82fa`

SDK Documentation

- https://docs.microsoft.com/en-us/python/api/overview/azure/ml/intro?view=azure-ml-py

Using your own Jupyter Notebook Services

- https://docs.microsoft.com/en-us/azure/machine-learning/service/samples-notebooks
- Install Conda Environment
  1. Download and install 64-bit Python 3.7 from https://docs.conda.io/en/latest/miniconda.html
  2. Open Anaconda Prompt to run the following commands:

`conda create -n enterpriseml python=3.6`	Create an environment named enterpriseml with Python 3.6
`conda activate enterpriseml`	Activate the environment created in Step #1. You will see the environment
`conda info –envs`	List the all the environments configured on your computer
`conda install tensorflow`	Install Tensorflow into the eml01 environment
`pip install azureml-sdk[notebooks]`	Pip is a universal installer that you can use when packages are available on conda.
`pip install azureml-sdk[automl]`	
`pip install azureml-sdk[databricks]`	
`pip install azureml-dataprep`	
`conda deactivate`	Run this command when you re done with experimentation or want to bring up another environment
`conda env remove --name enterpriseml`	Remove the environment completely from the system

- **Tutorial**: https://docs.microsoft.com/en-us/azure/machine-learning/service/quickstart-get-started

Data Preparation

- https://docs.microsoft.com/en-us/azure/machine-learning/service/tutorial-data-prep

Model Training

- **Auto Train**: https://docs.microsoft.com/en-us/azure/machine-learning/service/tutorial-auto-train-models
- **Tutorial**: https://docs.microsoft.com/en-us/azure/machine-learning/service/tutorial-train-models-with-aml

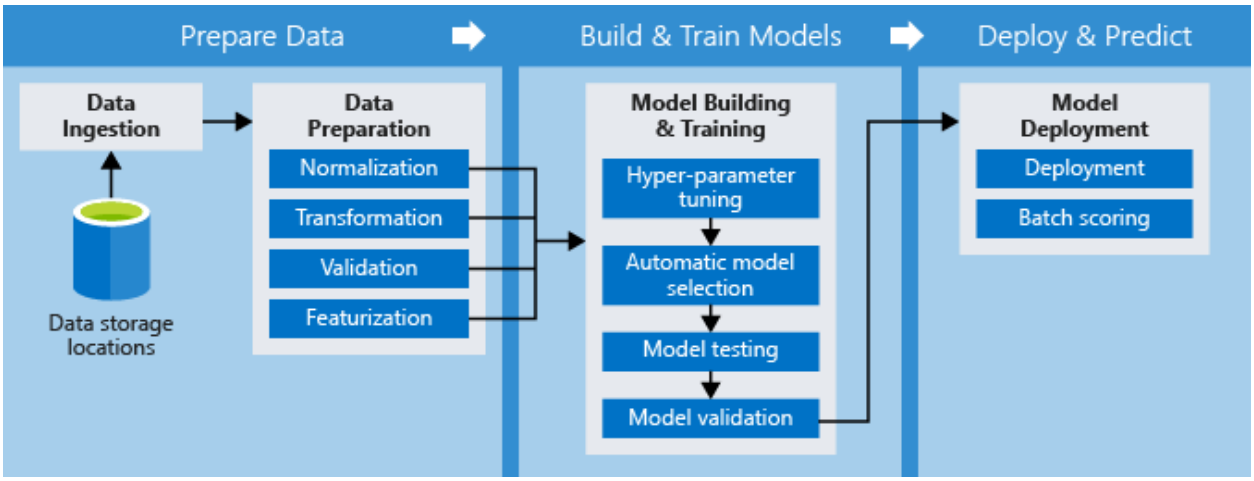
Model Deployment

- https://docs.microsoft.com/en-us/azure/machine-learning/service/tutorial-deploy-models-with-aml
- **Tutorial**: https://docs.microsoft.com/en-us/azure/machine-learning/service/tutorial-deploy-models-with-aml

Model Monitoring

- **Enable Data Collection from Models**: https://docs.microsoft.com/en-us/azure/machine-learning/service/how-to-enable-data-collection
- **Enable App Insights in Production**: https://docs.microsoft.com/en-us/azure/machine-learning/service/how-to-enable-app-insights

Machine Learning Pipelines



- https://docs.microsoft.com/en-us/azure/machine-learning/service/concept-ml-pipelines