



Azure Machine Learning DP 100

Description:

This course is designed for data scientists who want to develop and manage machine learning solutions on the cloud and who already have some familiarity with Python and machine learning frameworks like Scikit-Learn, PyTorch, and Tensorflow. In this course, students will learn how to build comprehensive Microsoft Azure solutions.

Start Date:

Doubt Clear Time:

Course Time:

Features:

Course material

Course resources

On demand recorded videos

Practical exercises

Quizzes

Assignments

Course completion certificate

What we learn:

Create the AzureML Workspace

Create a Dataset

Explore the AzureML Dataset

Understanding the AzureML Compute Resources

Deploy a real-time endpoint using Designer

Consume Model

Access Workspace, Datastore and Datasets using SDK

Pandas Dataframe and AzureML Dataset conversions

Upload local data to storage account via datastore

Simple Python Script in Designer

Execute Python Script using Zip Bundle

Requirements:

System with Internet Connection

Interest to learn

Dedication

Instructor:

Name:

MD Imran

Description:

Working as Data Scientist with experience in solving real world business problems across different domains.

>Set up Azure Machine Learning

Workspace:

- >>Understand the AzureMLService Architecture
- >>Create the AzureML Workspace
- >>View and Manage Workspace Settings
- >>Overview of New AzureML Studio
- >>What is AzureML Datastore and Dataset
- >>Create and Register a Datastore
- >>Create a Dataset
- >>Explore the AzureML Dataset
- >>Understanding the AzureML Compute Resources
- >>Create a Compute Cluster and Compute Instance

>Model Training and Run

Experiment:

- >>What is an AzureML Pipeline
- >>Create a pipeline using AzureML Designer
- >>Submit the Designer Pipeline run

>Deploy and Consume the

Models:

- >>Create an Inference Pipeline
- >>Deploy a real-time endpoint using Designer
- >>Consume Model
- >>Create a batch inference pipeline using Designer
- >>Run a Batch Inference Pipeline from Designer
- >>Result

>Data Processing using AzureML Designer:

- >>Get Data to the workspace
- >>Import Data to the workspace from external sources
- >>Edit Metadata - Column Names
- >>Understanding the Run
- >>Edit Metadata - Data Type
- >>Export Data to the Blob Storage
- >>Add Columns to the Dataset
- >>Add Rows to the Dataset
- >>Normalization of Data Part 1
- >>Normalization of Data Part 2
- >>Clean Missing Data
- >>Partition and Sample Data Part 1
- >>Partition and Sample Data Part 2

>Azure Machine Learning with Azure:

>>Introduction to AzureML SDK

>Set Up Azure Machine Learning

Workspace using sdk:

>>Create AzureML Workspace using SDK part 1

>>Verify the Workspace and Write the Workspace Config File

>>Create and Register a Datastore using AzureML SDK

>>Create and Register a Dataset using SDK part 1

>>Create and Register a Dataset using SDK part 2

>>Access Workspace, Datastore and Datasets using SDK

>>Pandas Dataframe and AzureML Dataset conversions

>>Upload local data to storage account via datastore

>Run Experiments and Train

Models:

>>Set up

>>Overview of Architecture

>>Create Sample Experiment part 1

>>Create Sample Experiment part 2

>>Run Sample Experiment

>>Azureml Environment part 1

>>Azureml Environment part 2

>>Azureml Environment part 3

- >>Azureml Environment part 4
- >>Azureml Environment part 5
- >>Train and Run a Model Script in AzureML Part 1
- >>Train and Run a Model Script in AzureML Part 2
- >>Train and Run a Model Script in AzureML Part 3
- >>Provisioning Compute Cluster Using SDK Part 1
- >>Provisioning Compute Cluster Using SDK Part 2
- >>Automate Model Training using AzureML SDK
- >>Define Pipeline Steps
- >>Define Training Steps
- >>Built the pipeline
- >>Command Line Arguments
- >>Data preparation script
- >>Training script
- >>Run the pipeline part 1
- >>Run the pipeline part 2
- >>Run the pipeline part 3

>Using Python Scripts in AzureML:

- >>Simple Python Script in Designer
- >>Execute Python Script using Zip Bundle
- >>Execute Python Script using Zip Bundle Demo