Gift This Course

A-Z Machine Learning using Azure Machine Learning (AzureML)

Hands on AzureML: From Azure Machine Learning Introduction to Advance Machine Learning Algorithms. No Coding Required.

BEST SELLER ★★★★★ 4.3 (215 ratings) 1,597 students enrolled

Created by Jitesh Khurkhuriya Last updated 3/2018 English English

What is Microsoft Azure ML?

Azure Machine Learning

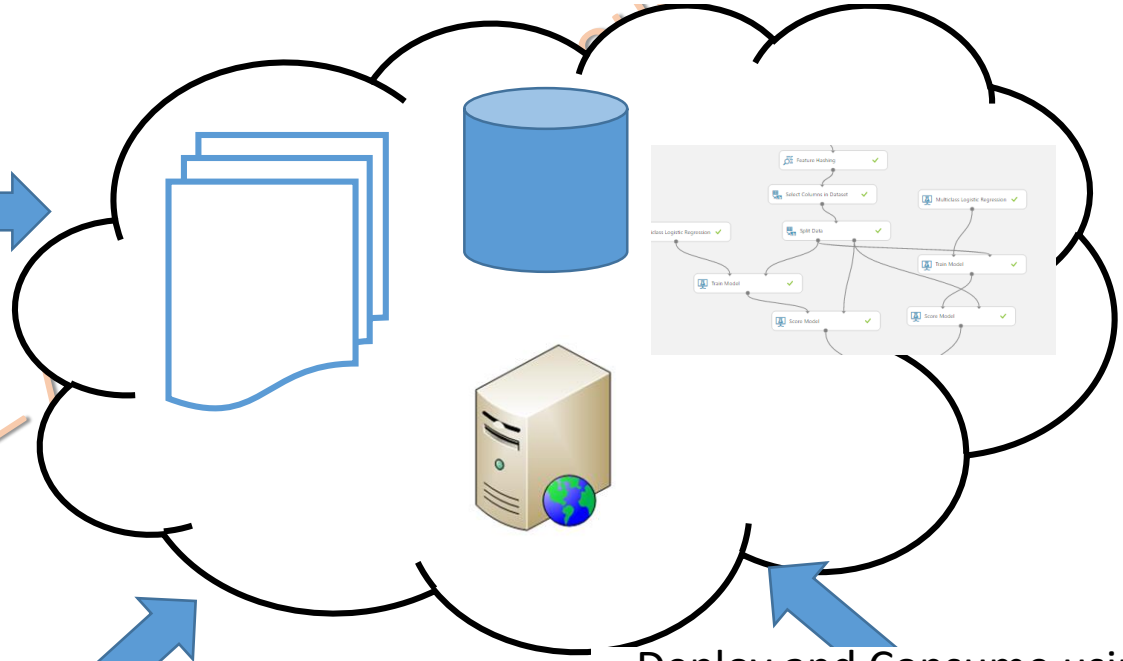
- Cloud based predictive analytics service
- Provides tools to create complete machine learning solution in the cloud
- Quick model creation and deployment using Azure ML Studio
- Allows Models to be deployed as web services
- Provides a large library of Pre-Built Machine learning algorithms and Modules
- Allows for extending your models with custom built R and Python code

Azure ML Studio Overview

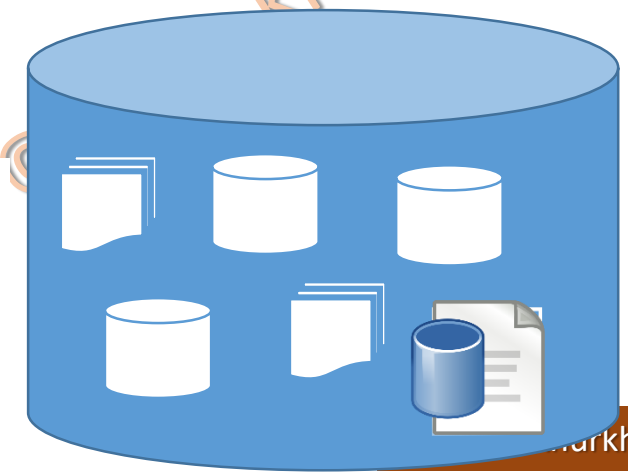
Access Azure anytime, anywhere using internet

- Data processing
- Feature Engineering
- Model Selection
- Model Scoring and Training
- Test and deploy models

Projects, Experiments, Models, Datasets



Deploy and Consume using Web Services



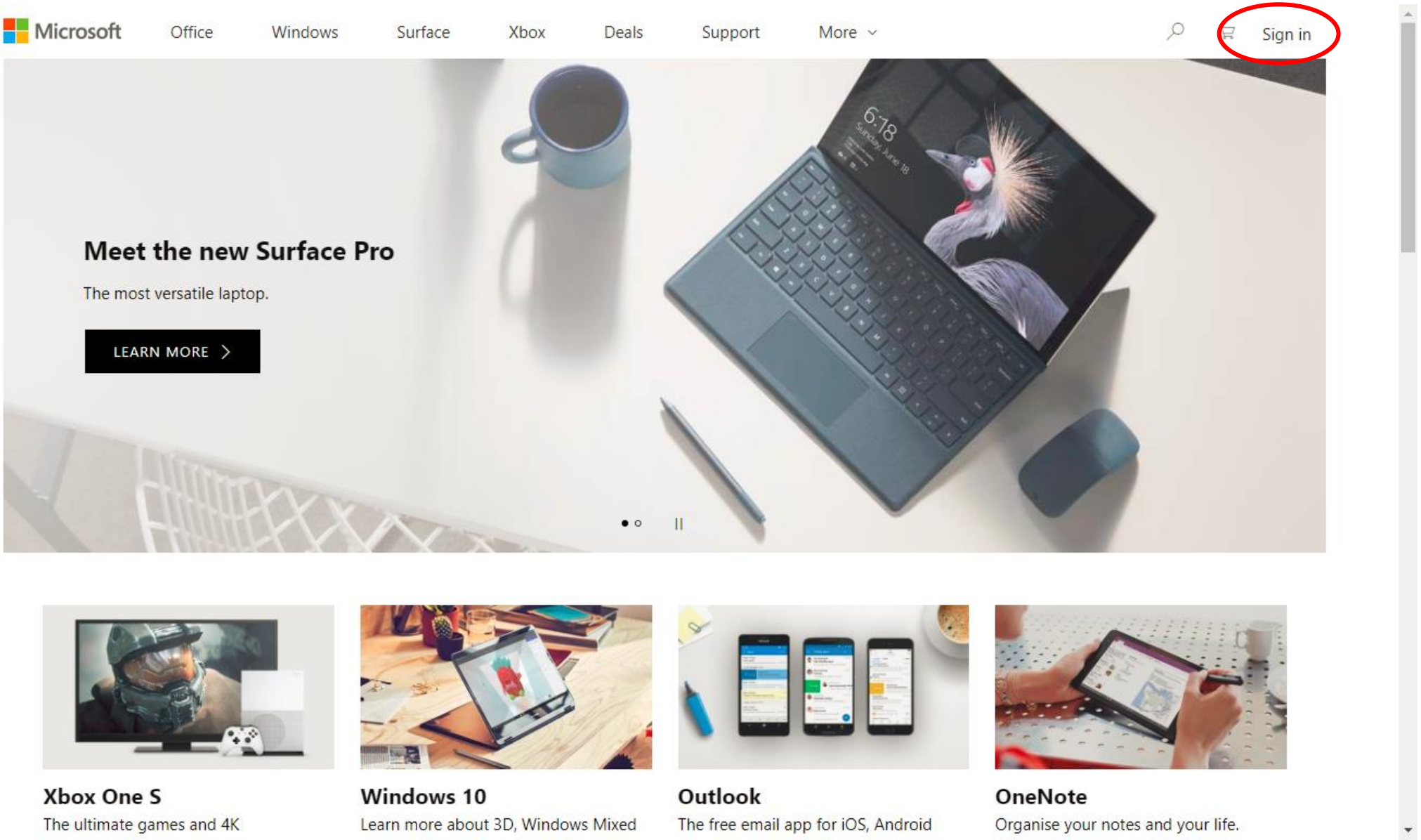
- Via HTTP
- Hive
- Azure SQL DB
- Data Feed
- On Premise Data
- Azure Document DB
- Azure BLOB Storage

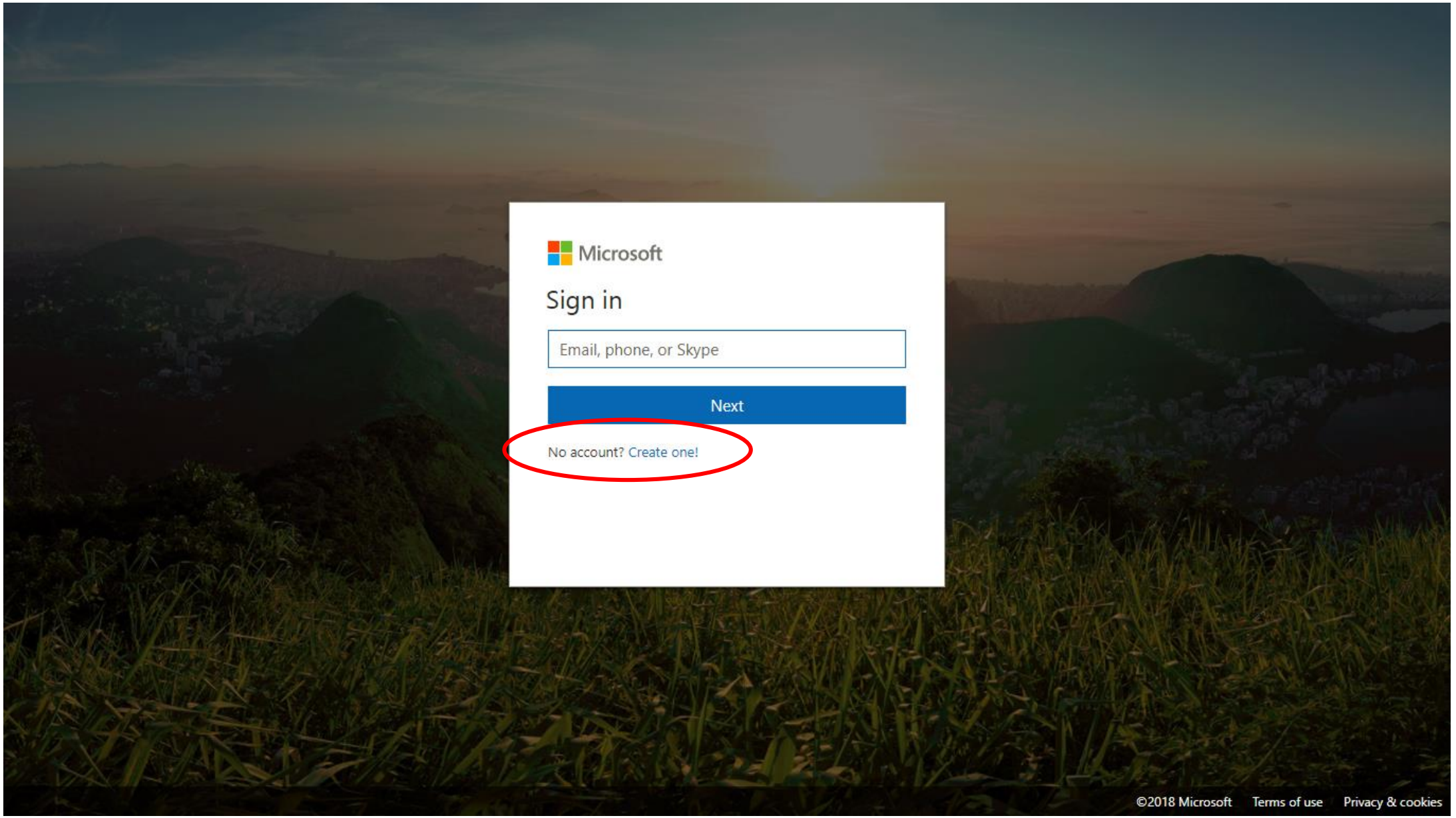
Export and Import data to Azure Cloud or ML Studio

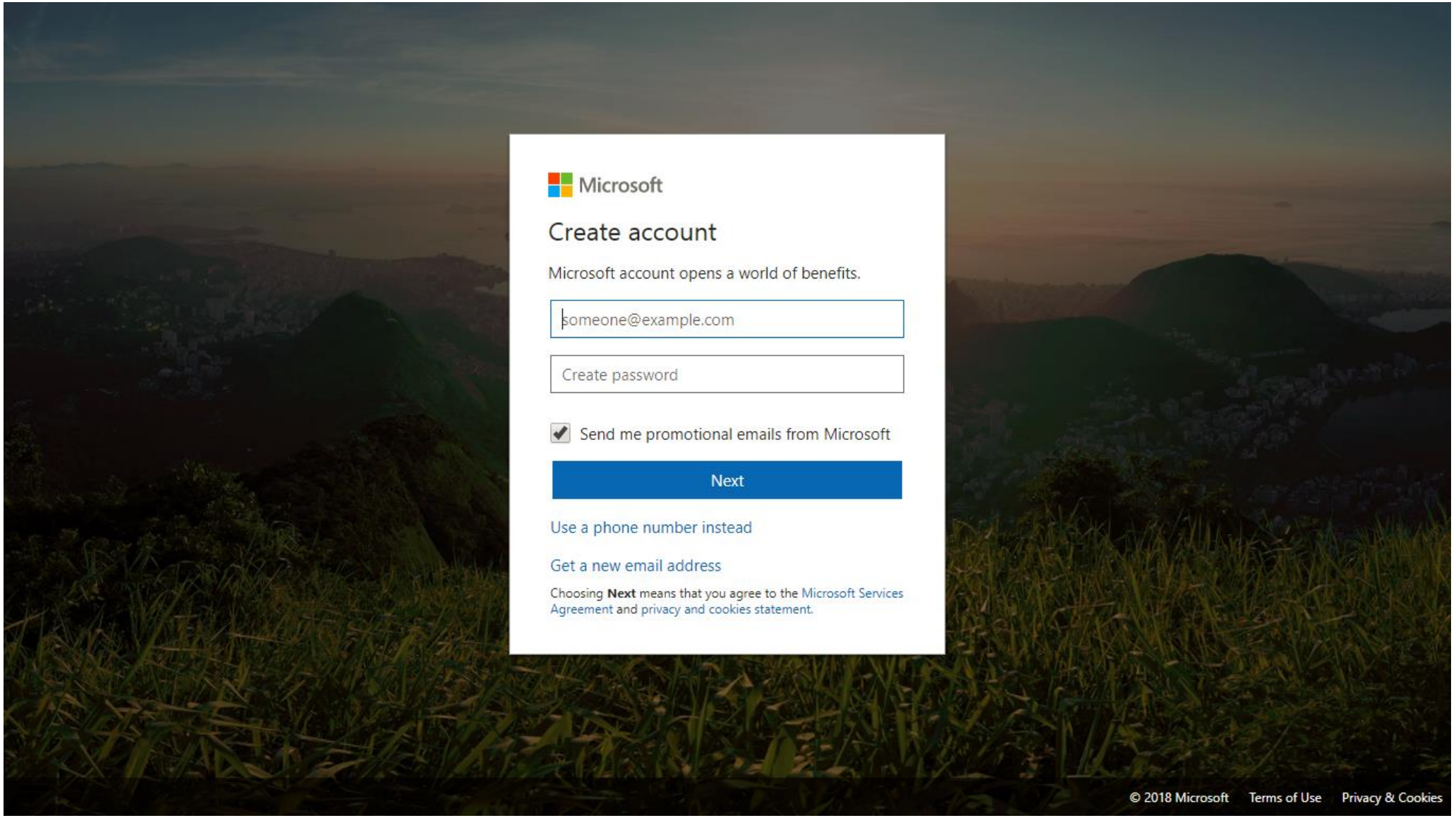
Create Your Azure ML Account

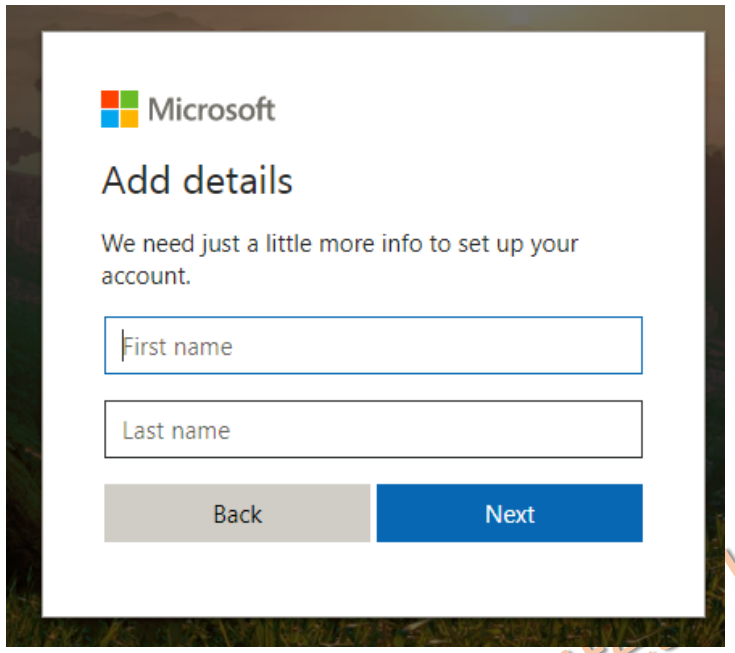
Disclaimer: Some Screens may have changed as Microsoft keeps updating the portal and user experience.

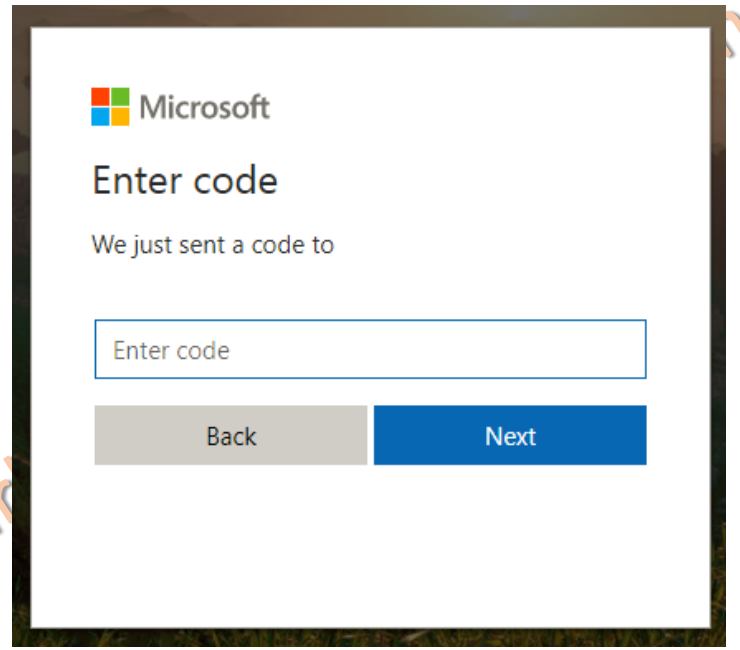
www.microsoft.com

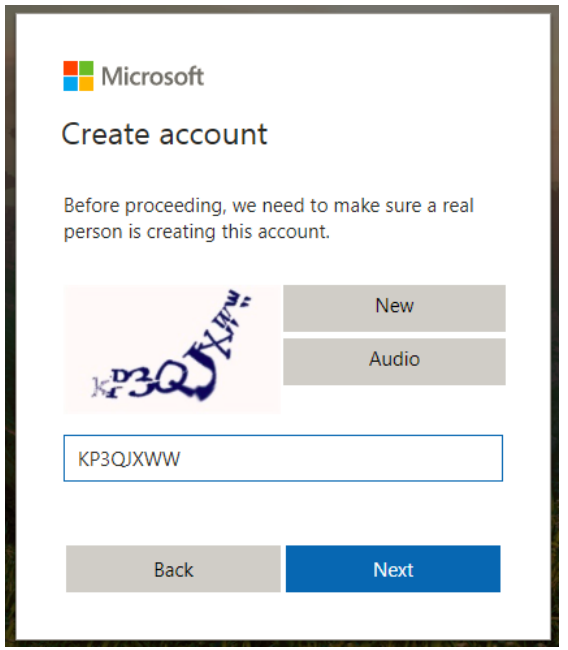












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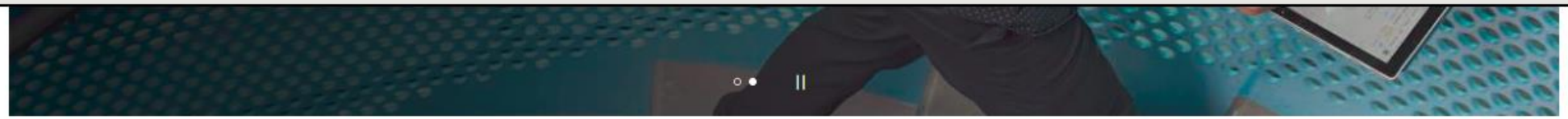
Software	PCs & Devices	Entertainment	Business	Developer & IT	Other
Windows apps	PCs & tablets	Xbox games	Microsoft Azure	.NET	Microsoft Store
OneDrive	Accessories	PC games	Microsoft Dynamics 365	Visual Studio	Free downloads & security
Outlook	VR & mixed reality	Windows digital games	Microsoft 365	Windows Dev Center	Education
Skype	Microsoft HoloLens	Movies & TV	Cloud platform	Docs	Gift cards
OneNote			Enterprise solutions		
			Data platform		

VIEW ALL >



Xbox One S

Windows 10

...re about 3D, Windows Mixed

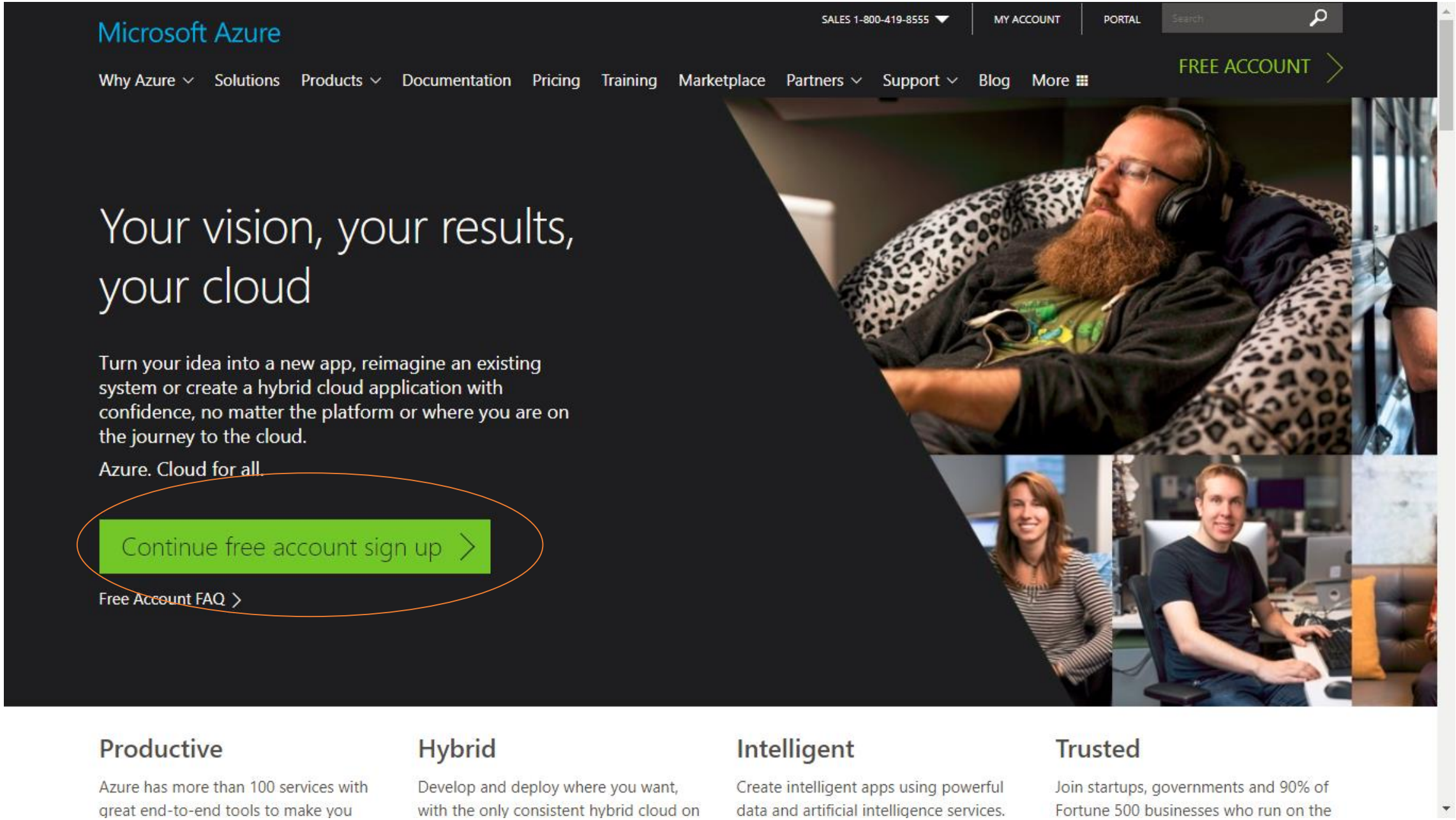
Outlook

The free email app for iOS, Android

OneNote

Organise your notes and your life.

https://azure.microsoft.com/en-in/



Microsoft Azure

Sign out

Azure free account sign up

Start with a ₹13,300 credit for 30 days, and keep going for free

1 About you

2 Identity verification by phone

3 Identity verification by card

4 Agreement

English

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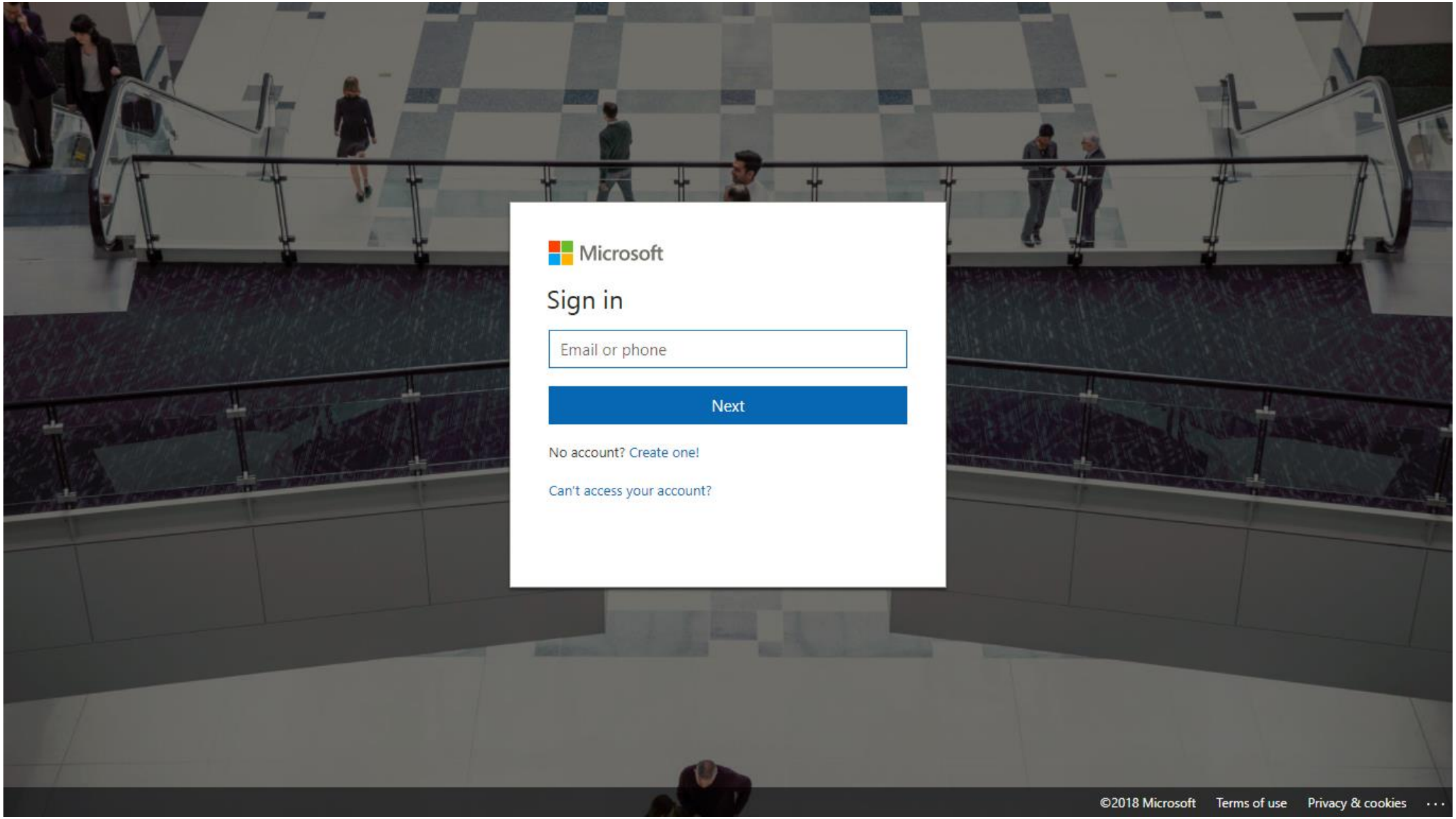
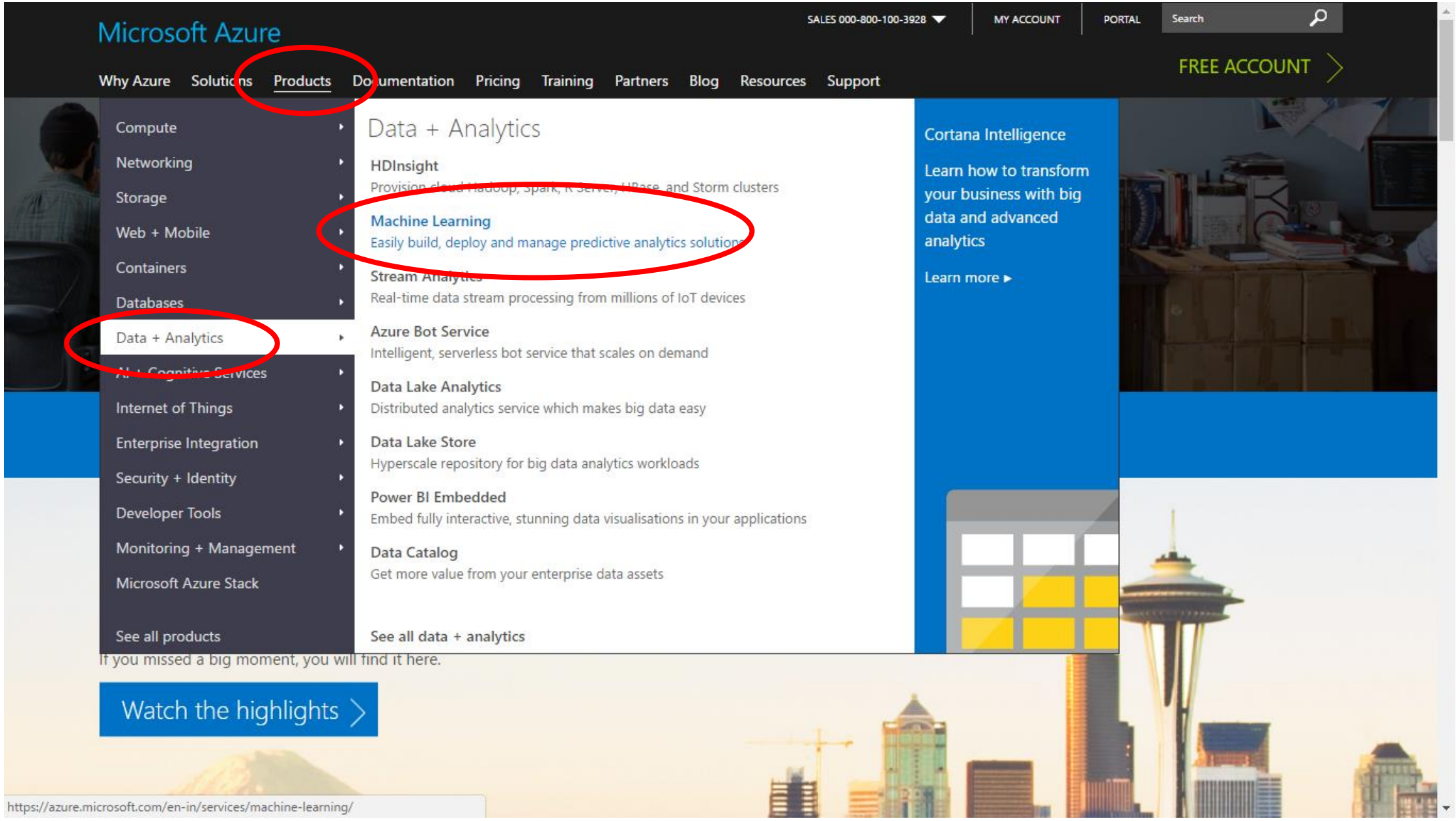
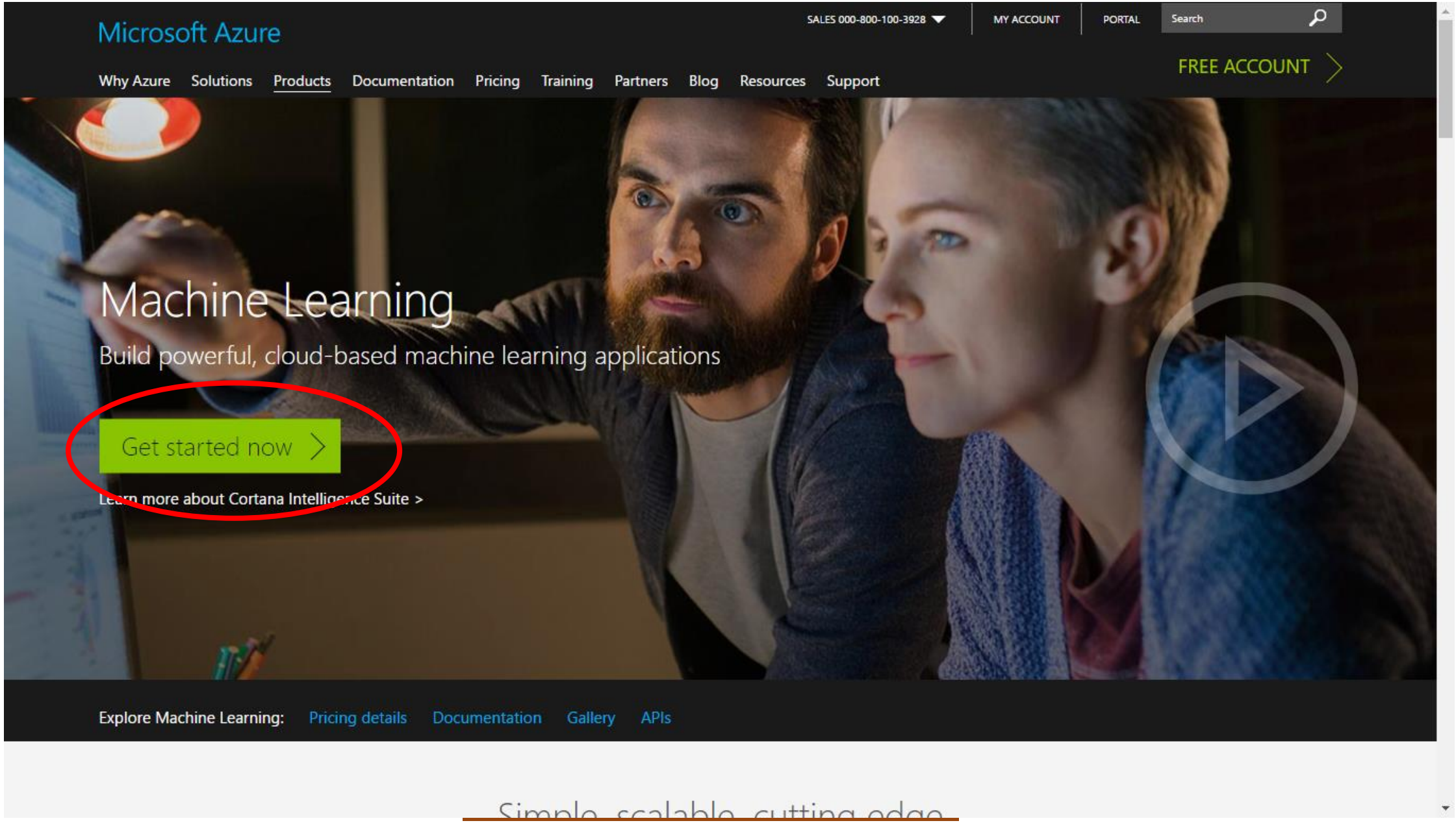


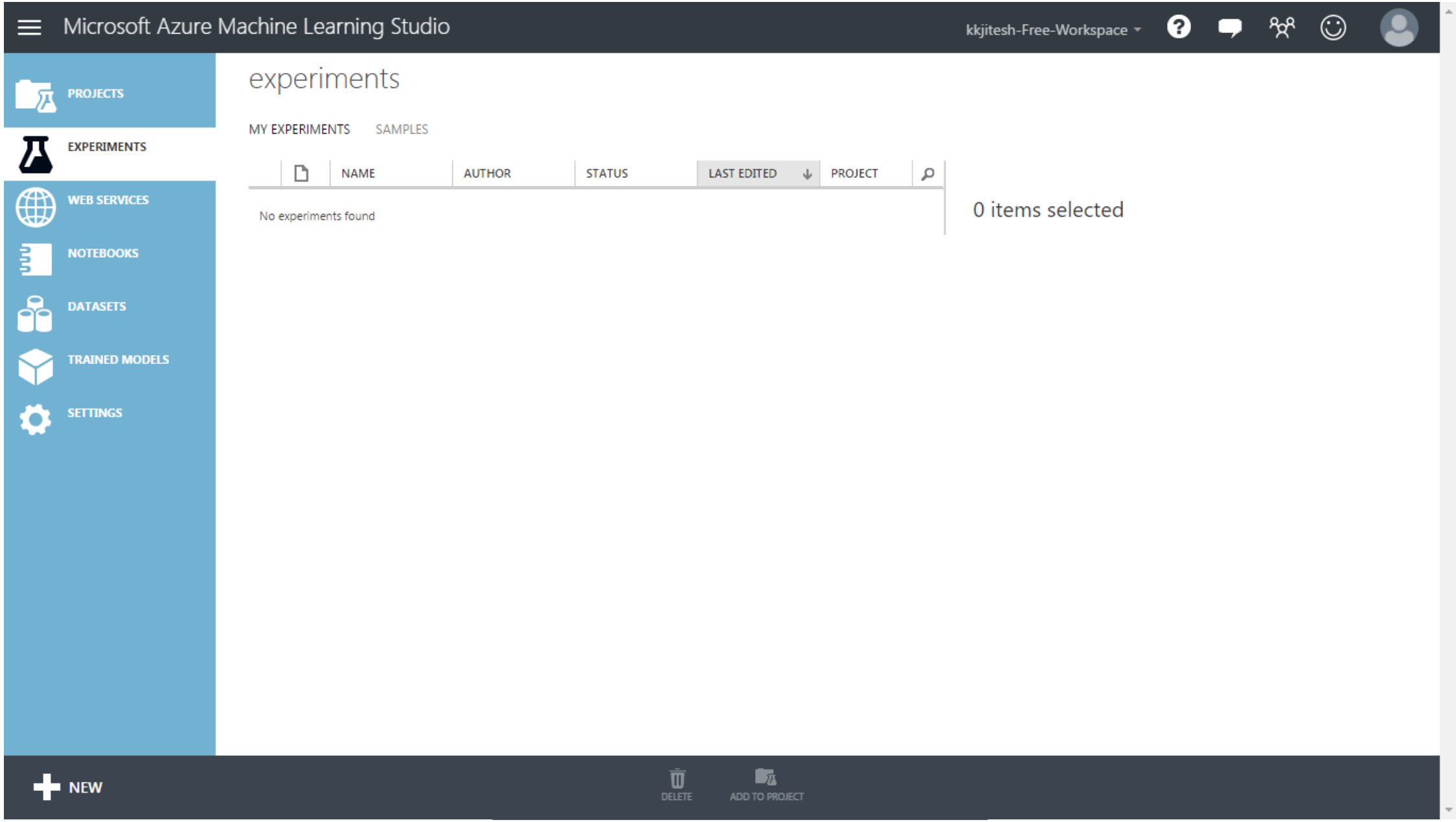


Welcome to Machine Learning



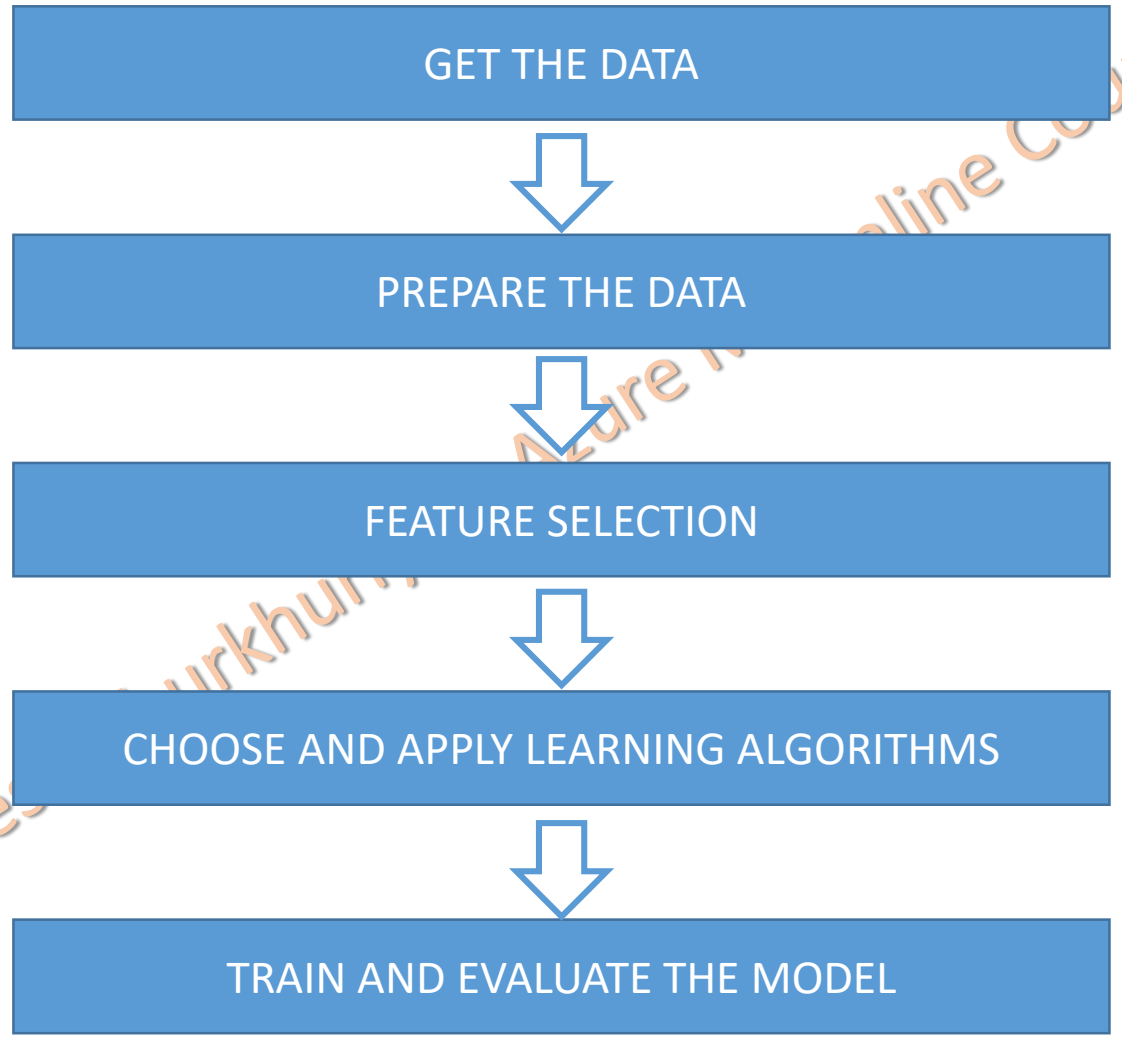
studio.azureml.net

Welcome to Azure ML Studio



Workflow of Azure ML project/experiment

Workflow of Azure ML



Workflow of Azure ML

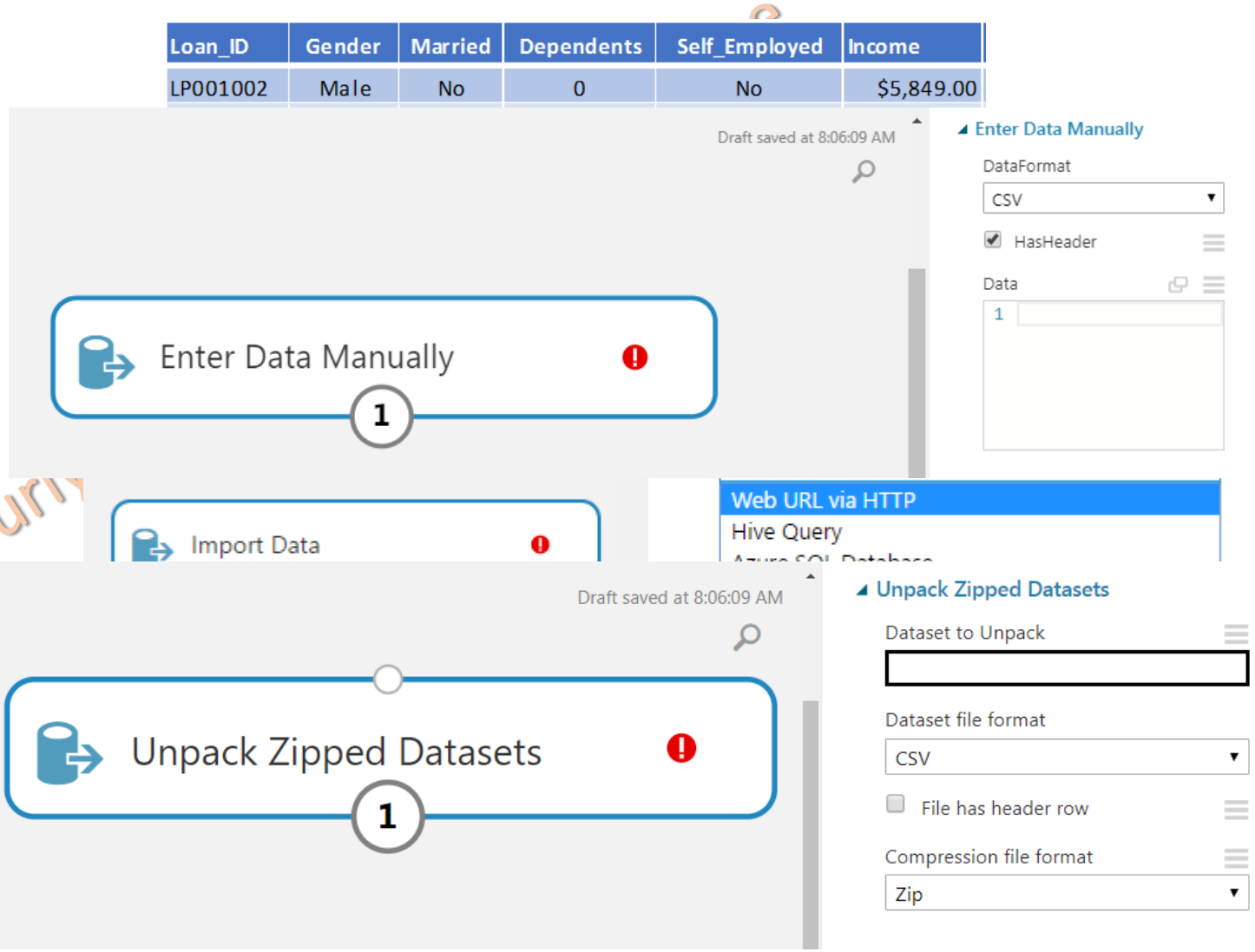
GET THE DATA

PREPARE THE DATA

Feature Selection

CHOOSE AND APPLY LEARNING ALGORITHMS

TRAIN AND EVALUATE THE MODEL



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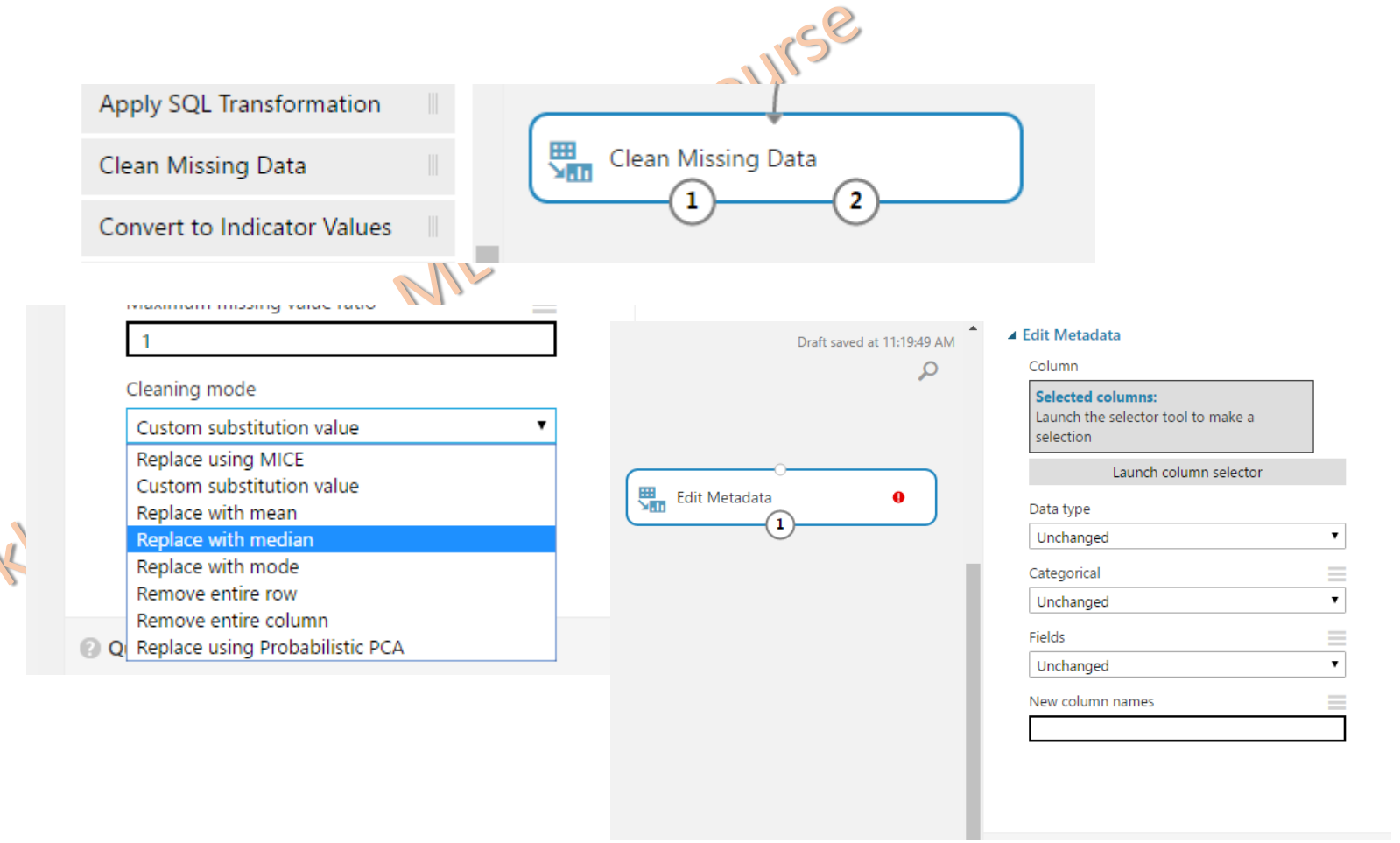

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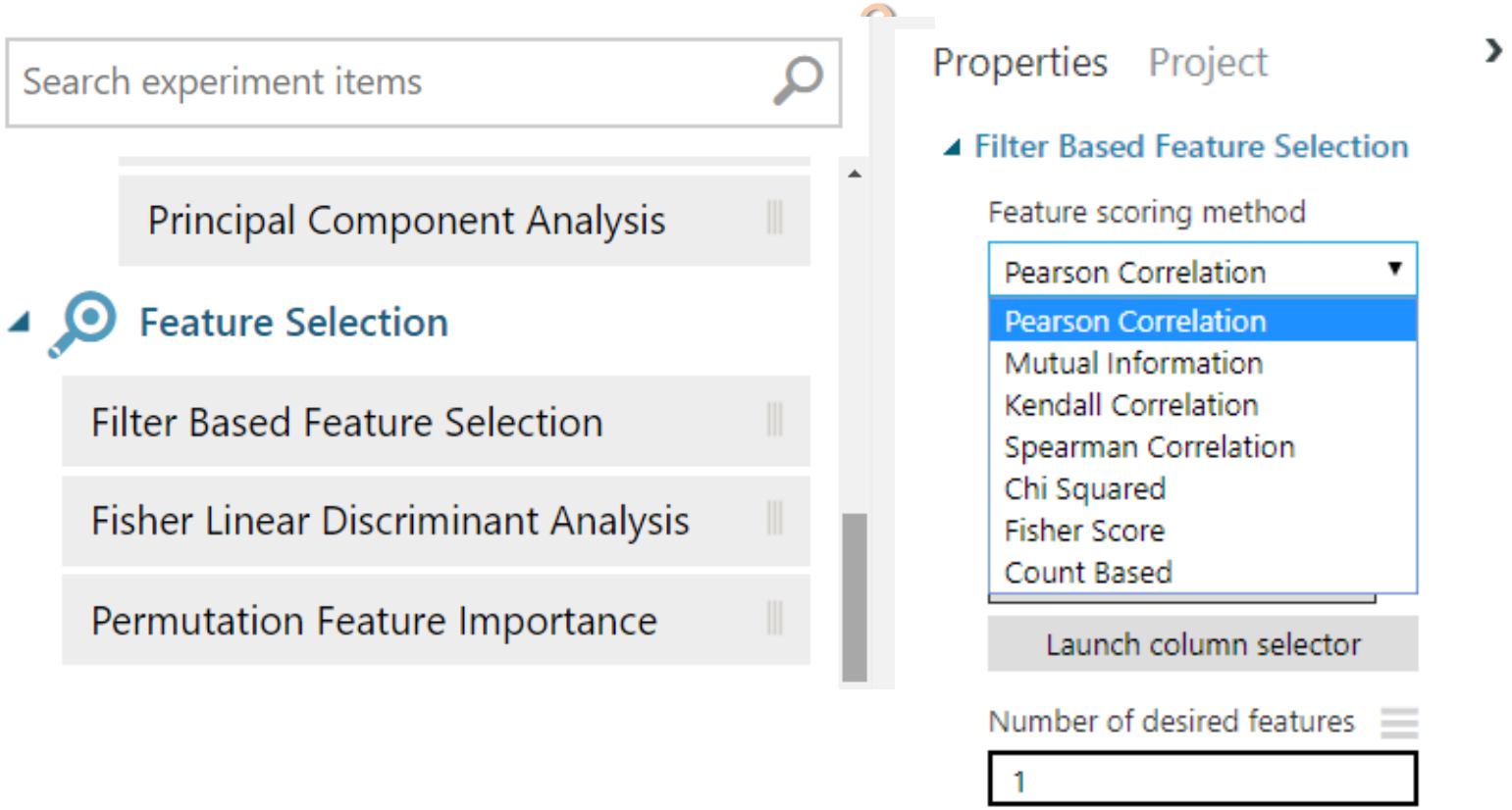

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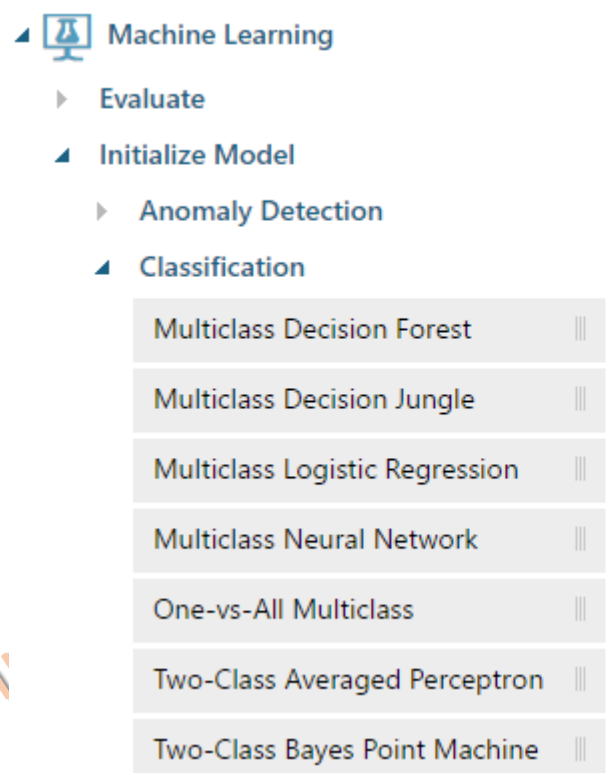

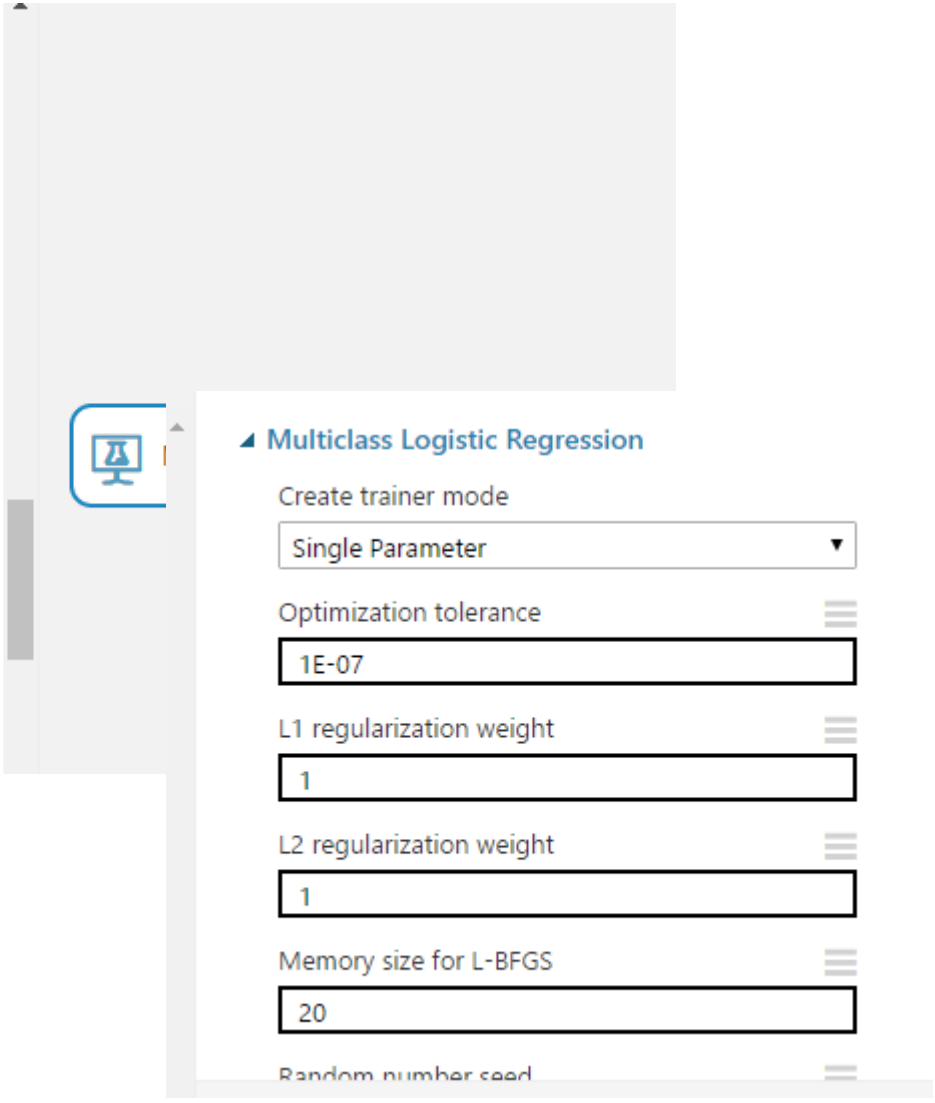

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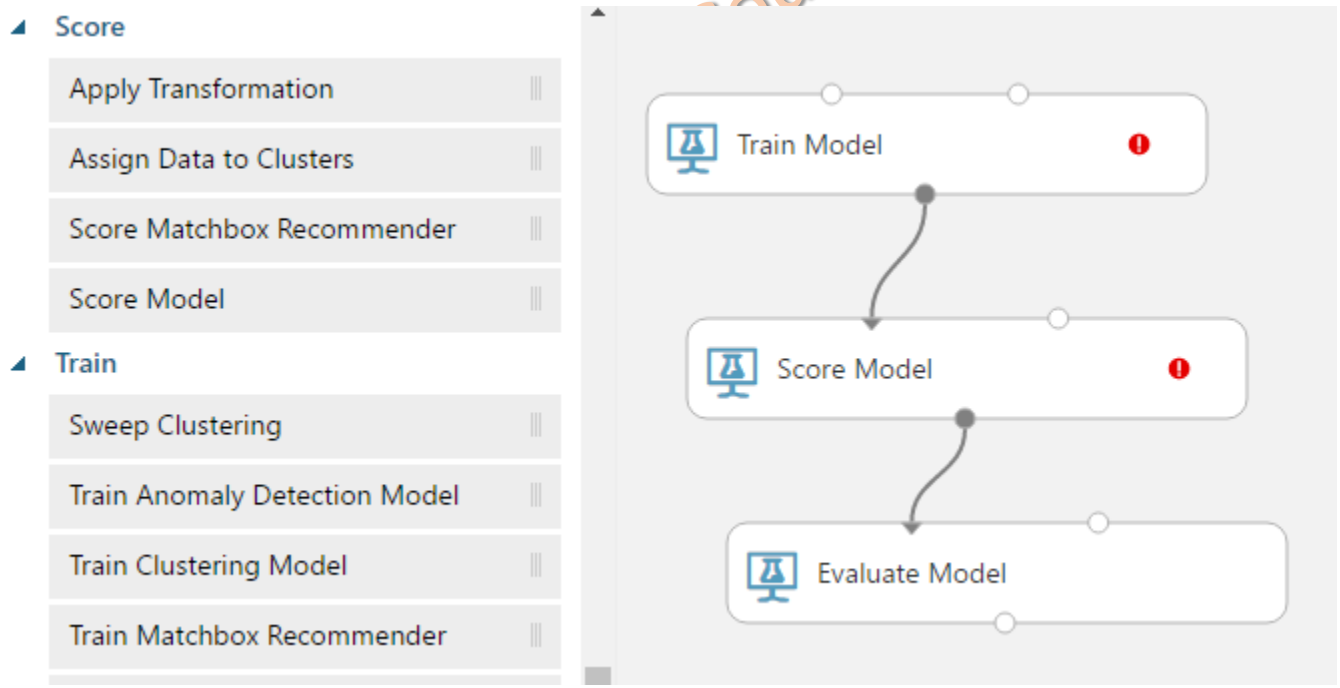
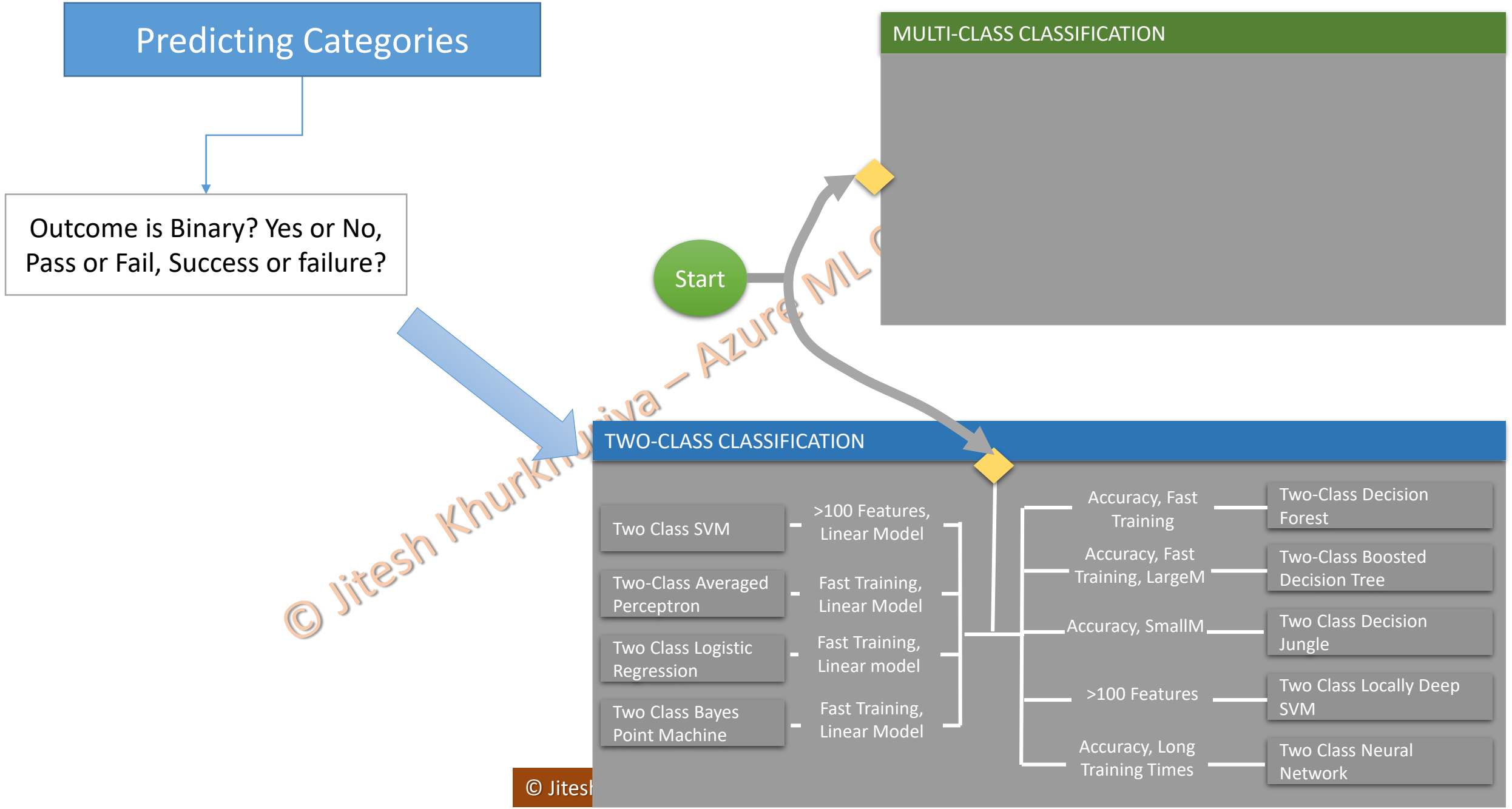


Azure ML Algorithm CheatSheet

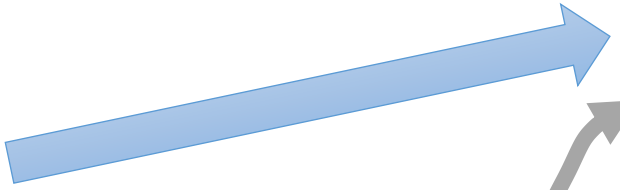
Predicting Categories

Outcome is Binary? Yes or No, Pass or Fail, Success or failure?



Predicting Categories

Outcome has multiple possibilities? Customer categories etc?

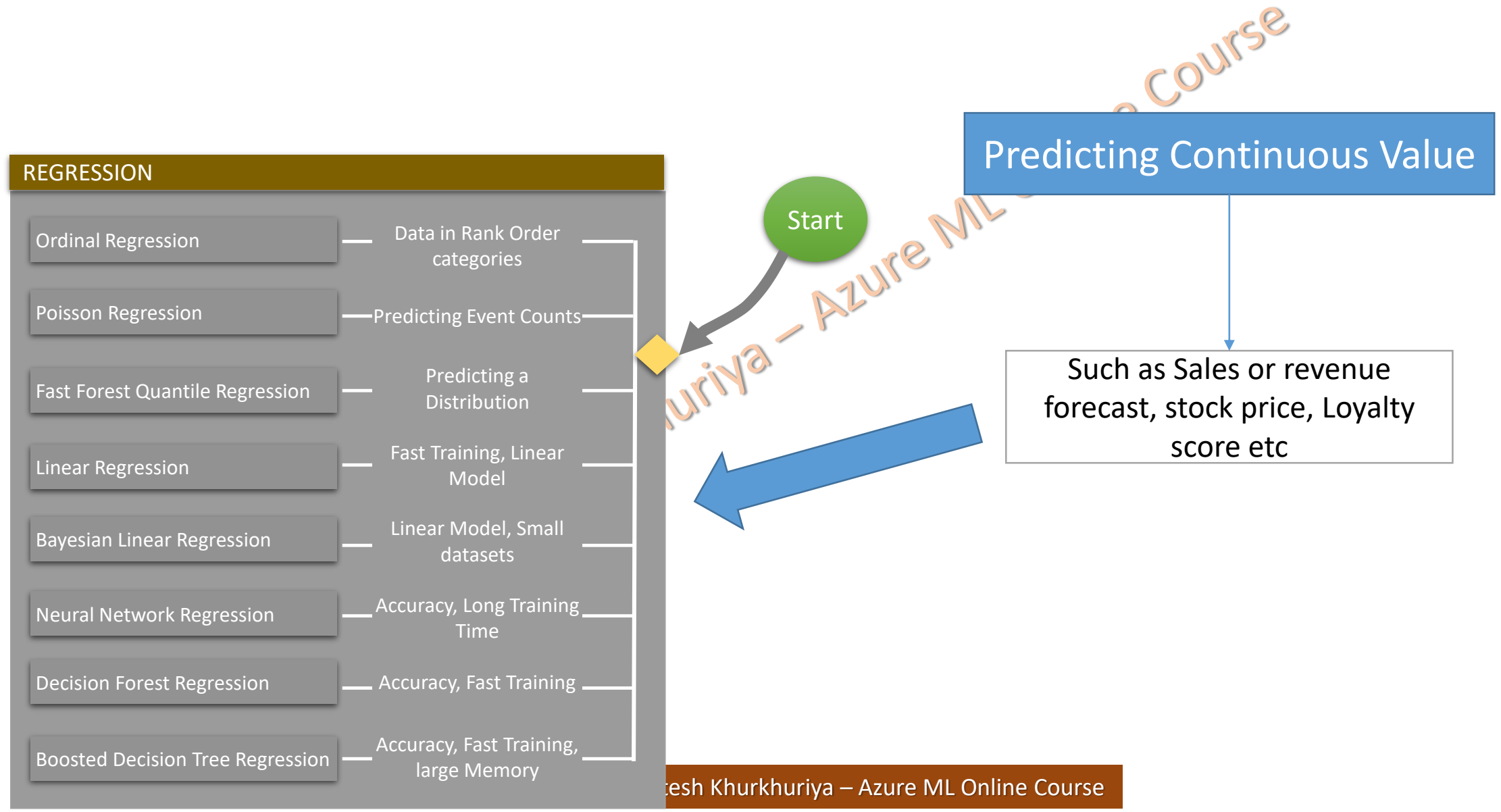


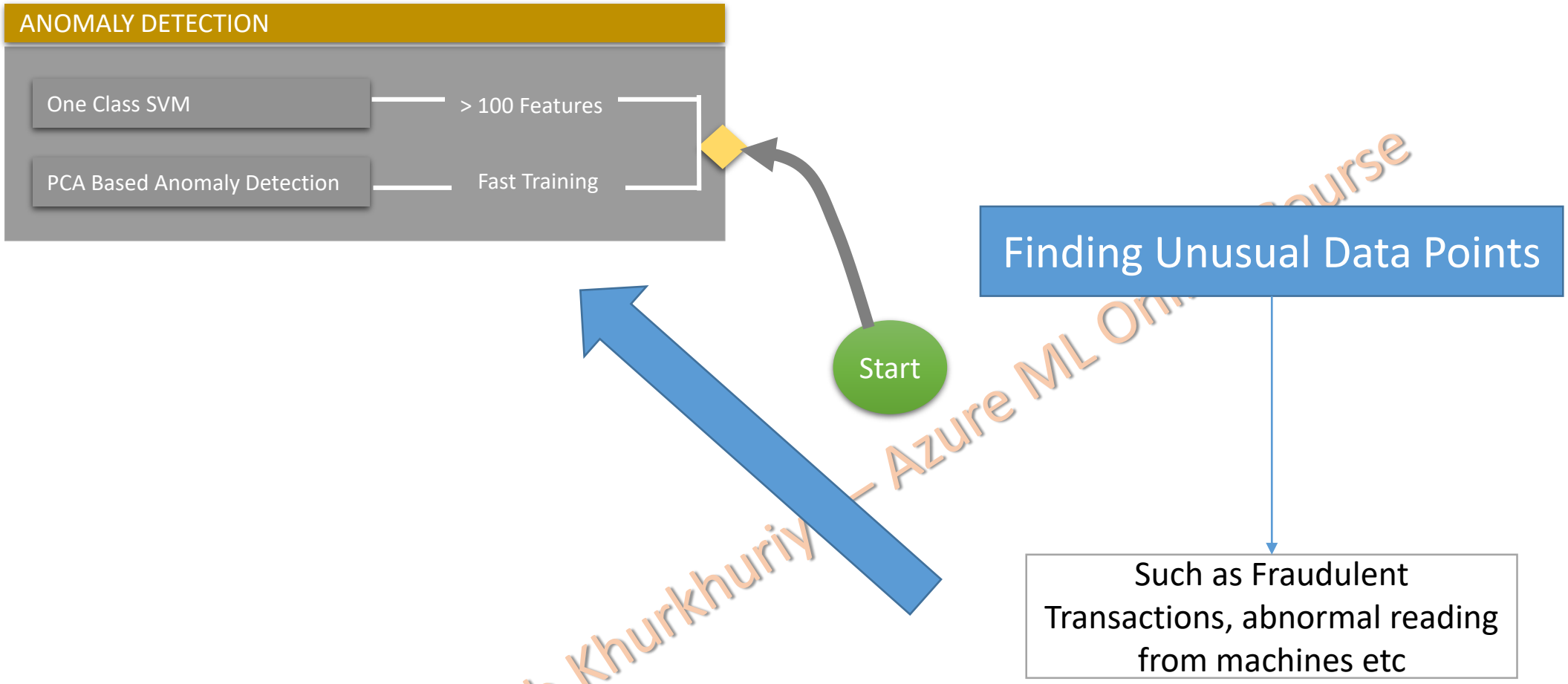
Start

MULTI-CLASS CLASSIFICATION

Fast Training, Linear Model	Multi-Class Logistic Regression
Accuracy, Long Training Times	Multi-Class Neural Network
Accuracy, Fast Training	Multi-Class Decision Forest
Accuracy, Small Memory Footprint	Multi-Class Decision Jungle
Depends on Two-Class	One-V-All Multiclass

TWO-CLASS CLASSIFICATION





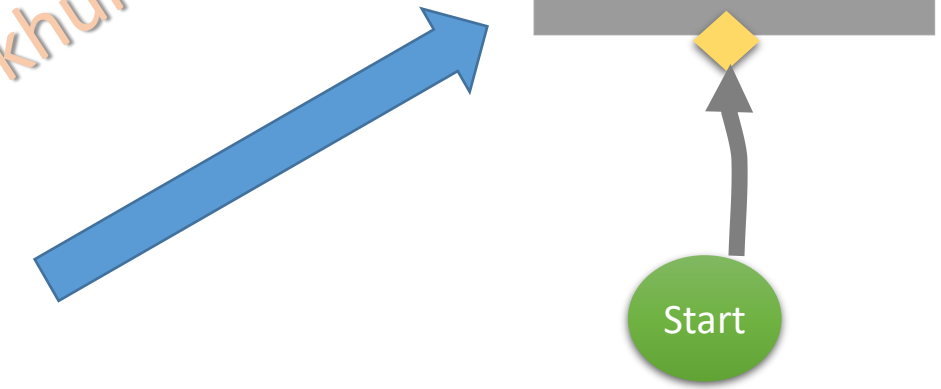
What to consider while choosing an algorithm?

Predicting Categories

Predicting Continuous Value

Finding Unusual Data Points

Discovering Structure



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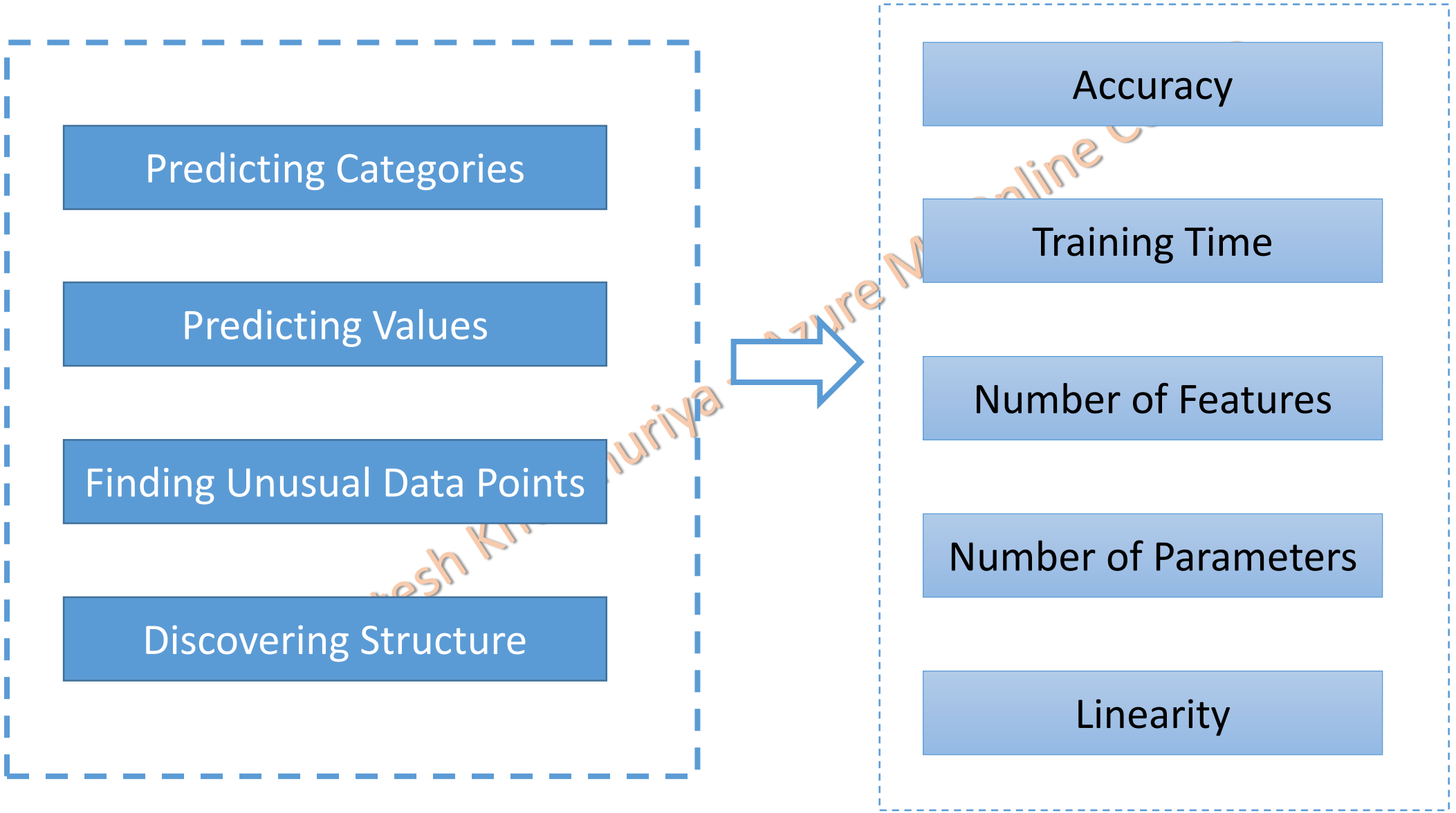

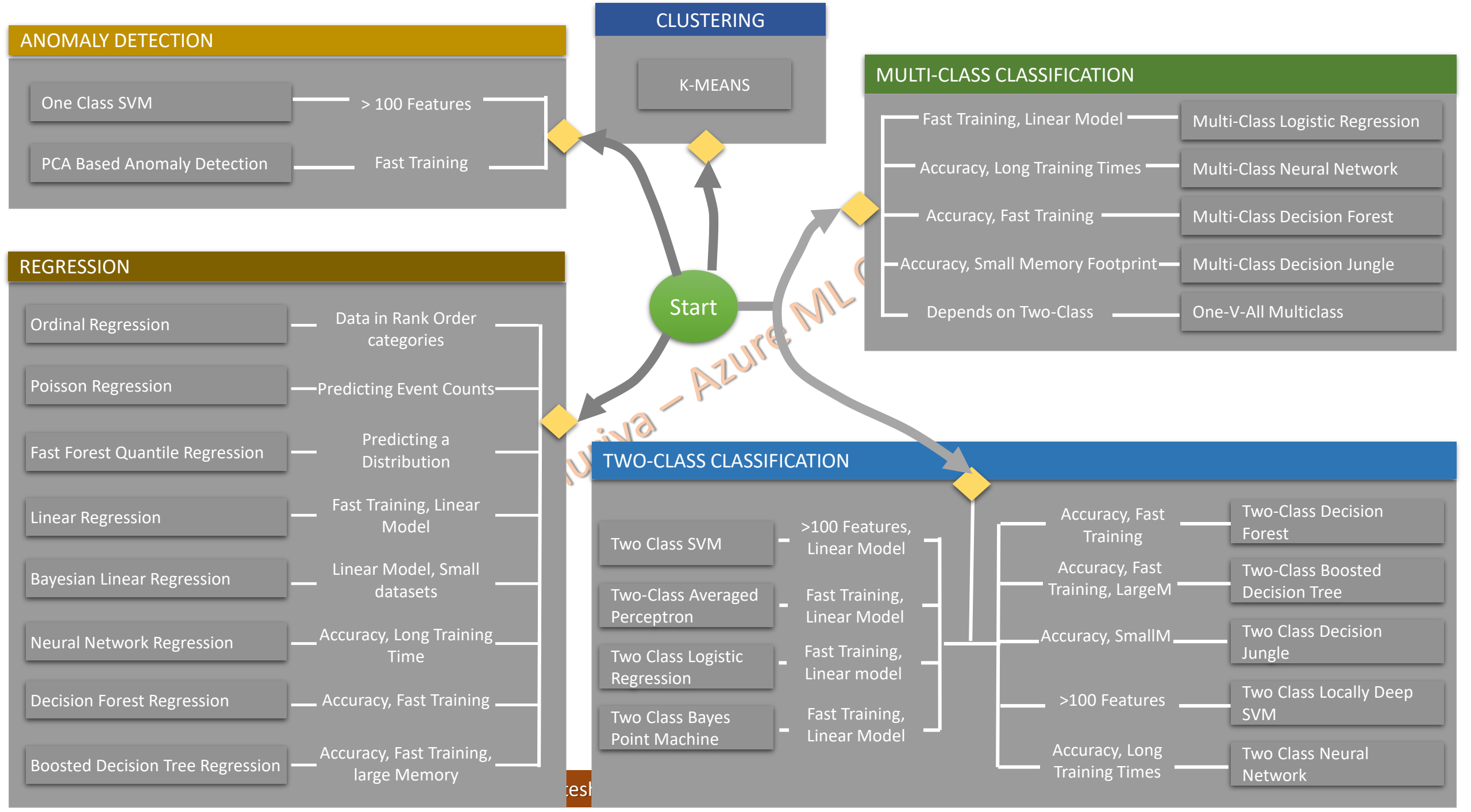
ANOMALY DETECTION
One Class SVM
> 100 Features
PCA Based Anomaly Detection
Fast Training
CLUSTERING
K-MEANS
MULTI-CLASS CLASSIFICATION
Fast Training, Linear Model
Multi-Class Logistic Regression
Accuracy, Long Training Times
Multi-Class Neural Network
Accuracy, Fast Training
Multi-Class Decision Forest
Accuracy, Small Memory Footprint
Multi-Class Decision Jungle
Depends on Two-Class
One-V-All Multiclass
Start
REGRESSION
Ordinal Regression
Data in Rank Order categories
Poisson Regression
Predicting Event Counts
Fast Forest Quantile Regression
Predicting a Distribution
Linear Regression
Fast Training, Linear Model
Bayesian Linear Regression
Linear Model, Small datasets
Neural Network Regression
Accuracy, Long Training Time
Decision Forest Regression
Accuracy, Fast Training
Boosted Decision Tree Regression
Accuracy, Fast Training, large Memory
TWO-CLASS CLASSIFICATION
Two Class SVM
>100 Features, Linear Model
Two-Class Averaged Perceptron
Fast Training, Linear Model
Two Class Logistic Regression
Fast Training, Linear model
Two Class Bayes Point Machine
Fast Training, Linear Model
Accuracy, Fast Training
Two-Class Decision Forest
Accuracy, Fast Training, LargeM
Two-Class Boosted Decision Tree
Accuracy, SmallM
Two Class Decision Jungle
>100 Features
Two Class Locally Deep SVM
Accuracy, Long Training Times
Two Class Neural Network

Thank You and Have a Great Time !