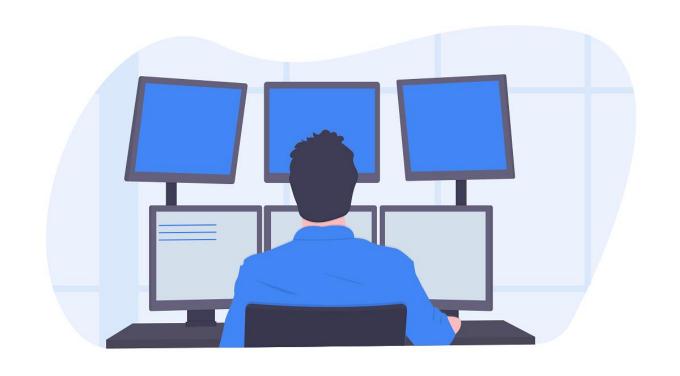
Introduction to Azure Machine Learning

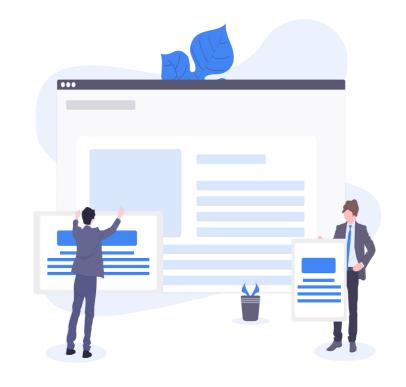
Eng Teong Cheah



Agenda

What is machine learning studio
Introduction to the Data Science Virtual Machine

What is machine learning studio



What is machine learning studio

Azure Machine Learning studio is a collaborative, drag-and-drop tool you can use to build, test, and deploy predictive analytics solutions on your data.

Machine Learning Studio publishes models as web services that can easily be consumed by custom apps or BI tools such as Excel.

What is machine learning studio

Machine Learning Studio is where data science, predictive analytics, cloud resources, and your data meet.

Machine Learning Studio Interactive Workspace

To develop a predictive analysis model, you typically use data from one or more sources, transform and analyse that data through various data manipulation and statistical functions, and generate a set of results.

Developing a model like this is an interactive process.

Machine Learning Studio Interactive Workspace

As you modify the various functions and their parameters, your results converge until you are satisfied that you have trained effective model.

Modules

A module is an algorithm that you can perform on your data.

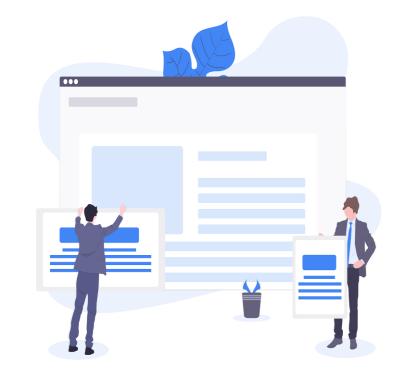
Machine Learning Studio has a number of modules ranging from data ingress functions to training, scoring, and data validation processes.

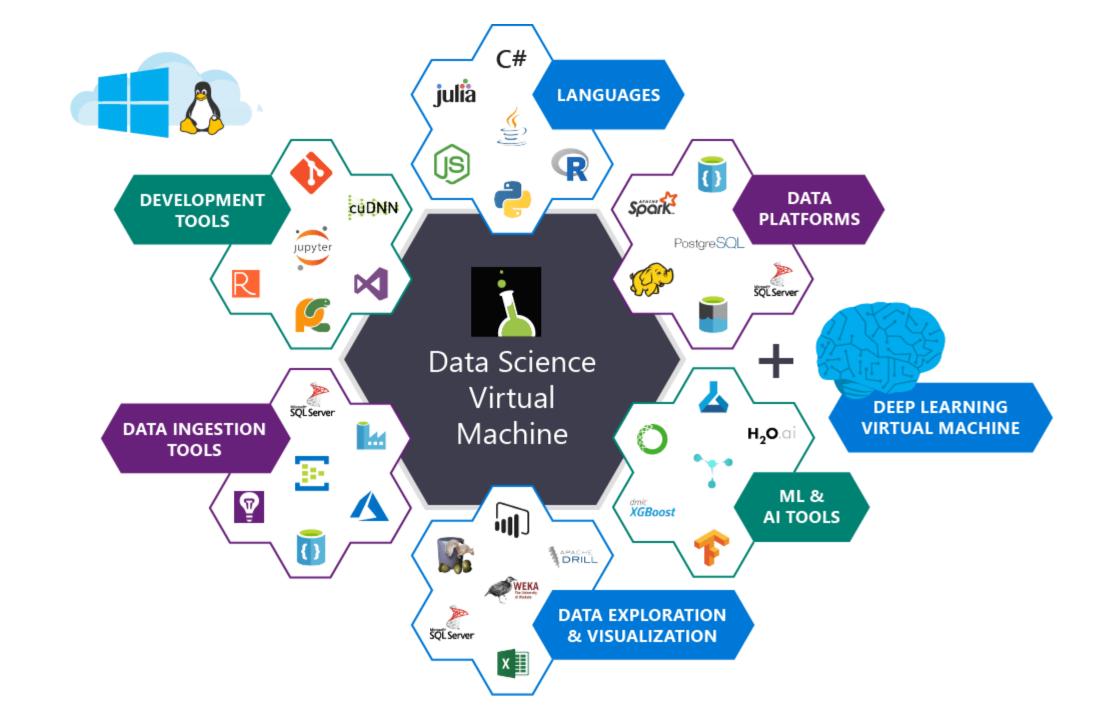
Modules

Here are some examples of included modules:

- Convert to Attribute-Relation File Format (ARFF)
- Compute Elementary Statistics
- Linear regression
- Score Model

Introduction to the Data Science Virtual Machine





What included



Anaconda Python



R Server



Jupyter Notebooks



Visual Studio



Excel



SQL Server



PowerBI



Python



Microsoft Cognitive Toolkit



Apache Spark

Demo

Using Machine Learning Studio



Resources

Tutorial Points

Microsoft Docs

<u>Lecture Collection | Convolutional Neural Networks for Visual Recognition (Spring 2017)</u>

Python Numpy Tutorial

Clone and run simple experiment

Thank you

