

Introduction to Azure Machine Learning

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Agenda

What is machine learning studio
Developing and hosting application

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 analyze 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

Developing & hosting application



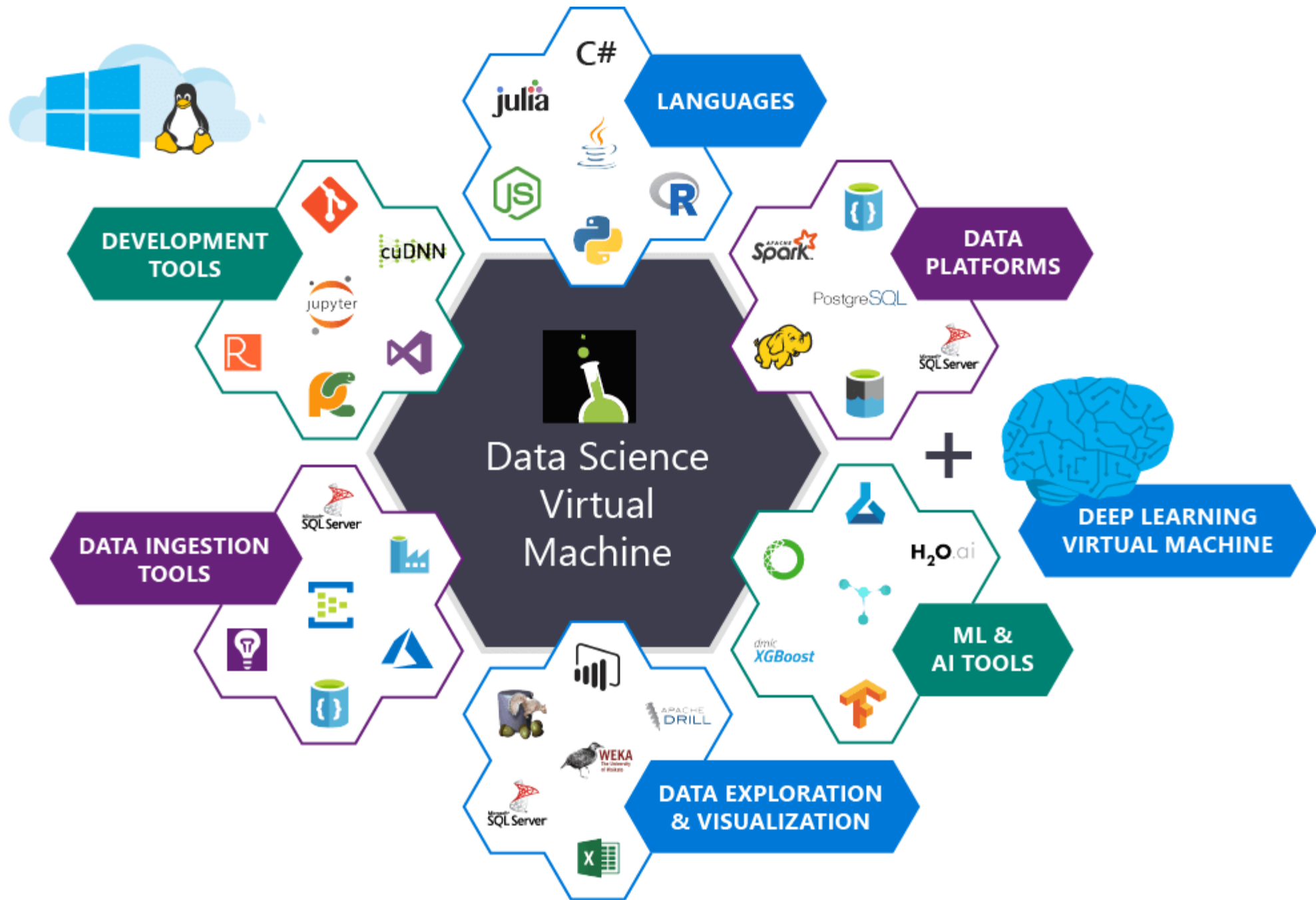
Developing and hosting application

Using Data Science Virtual Machine

- Pre-configure environments for data scientists
- Seamless integration with Azure services
- Any VM size, horizontal scale out with Azure Batch, burst compute
- User extensible

Pre-Configured environments in the cloud for Data Science and AI Development

DSVMs are Azure Virtual Machine images, pre-installed, configured and tested with several popular tools that are commonly used for data analytics, machine learning and AI training.



What included



Anaconda Python



R Server



Jupyter Notebooks



Visual Studio



Excel



SQL Server



PowerBI



Python



Microsoft Cognitive
Toolkit



Apache Spark

Demo

Clone and run simple experiment



Resources

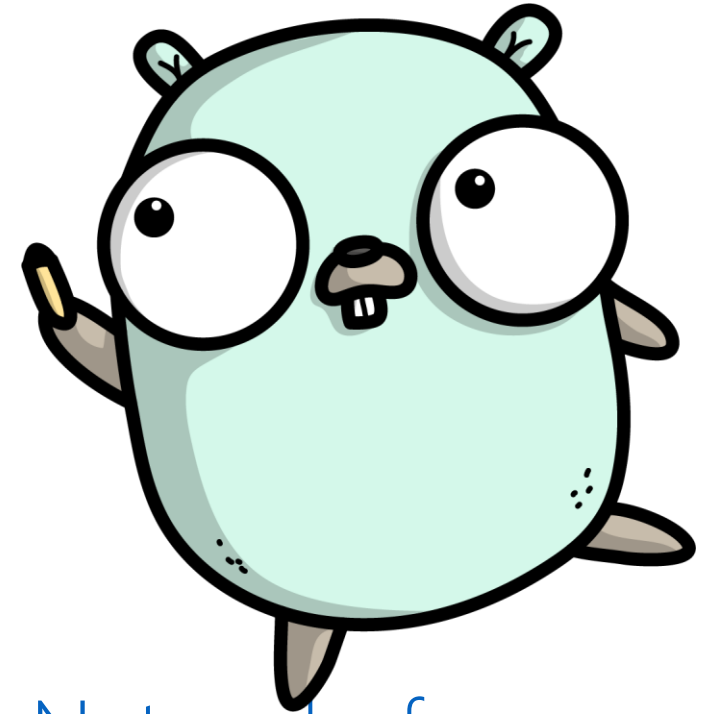
[TutorialsPoint](#)

[Microsoft Docs](#)

[Lecture Collection | Convolutional Neural Networks for
Visual Recognition\(Spring 2017\)](#)

[Python Numpy Tutorial](#)

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Thank you



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