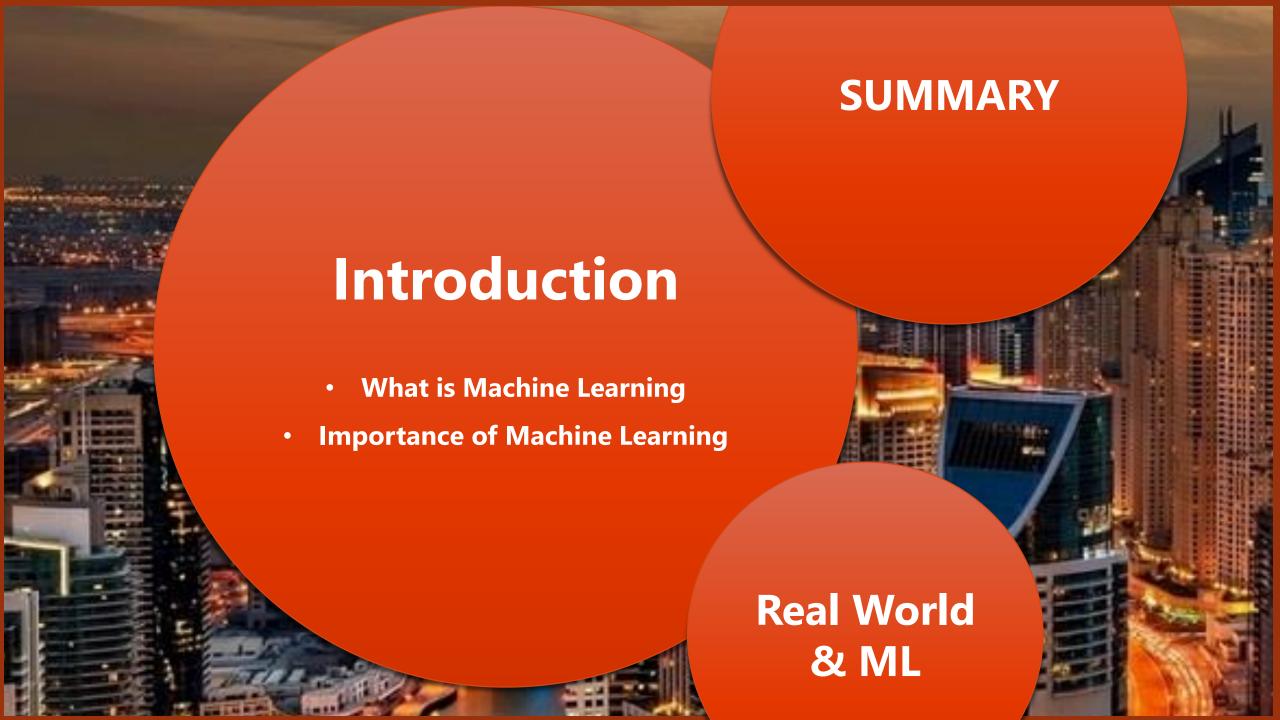
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How ML Al and Deep Learning differ?

Artificial Intelligence

the science and engineering of making intelligent machines that have the ability to achieve goals like humans do

-John McCarthy

Machine Learning

large sub-field of AI dealing with the field of study that gives computers the ability to learn without being explicitly programmed. It is a way to implement AI.

Deep Learning

Deep Learning is a technique for implementing Machine Learning.
Inspired by working of Human Brain, and Neurons are the origin for the term Neural Networks.



More

Deep Learning

The subset of Machine Learning composed of algorithms that permit software to train itself to perform tasks, by exposing multilayered Neural Network to data.

e.g. Speech and Image recognition

Machine Learning
A subset of AI that
include statistical
techniques that
enables Machines to
improve at tasks with

experience

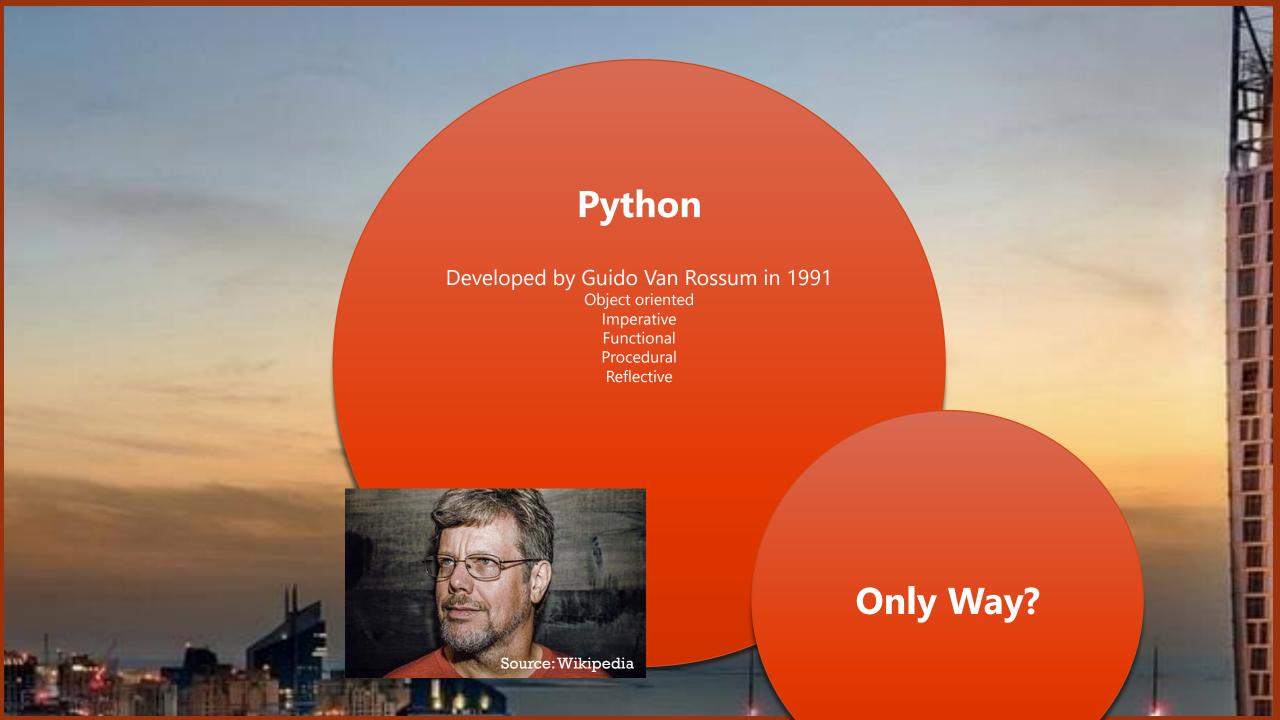
Artificial Intelligence
Any technique that
enables computers to
mimic human Intelligence,
using logic, rules, decision
trees and Machine
Learning and Deep
Learning

Real World & Machine Learning

Instance	Example	Major Share in tech
Health Care	Fit-Bands and Wearables	Apple, Samsung
Personal Assistants	Google Assistant, Siri, Alexa, Cortana	Google, Amazon, Apple
Face Recognition	Facebook auto-tags, Google Photos, Face ID	Facebook, Google, Apple
Alternate routes for traffic	Google Maps	Google
Search Suggestions in SEO	Google search, Bing search	Google, Microsoft
Mail Labelling	Outlook, Gmail	Microsoft, Google
Combating Frauds	Online Payment Services	Paypal
Recommendations	Streaming and retail services	Netflix, Amazon, Spotify Flipkart

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Python

Basic Programming Constructs

-Conditionals, Looping, functions

Python Data Structures

-List, Tuples, Dictionaries, List Comprehensions

Libraries in Python

-Scikit-Learn and TesorFlow

Intro to NumPy, Pandas

-NumPy Arrays and Pandas Dataframes

Data Visualization

-Importing Data in Python, Matplotlib

Python Data Structures

-List, Tuples, Dictionaries, List Comprehensions



Is Python the only way?







Why Python Then?

Less Code

Prebuilt Libraries

Support

Platform Agnostic APIs

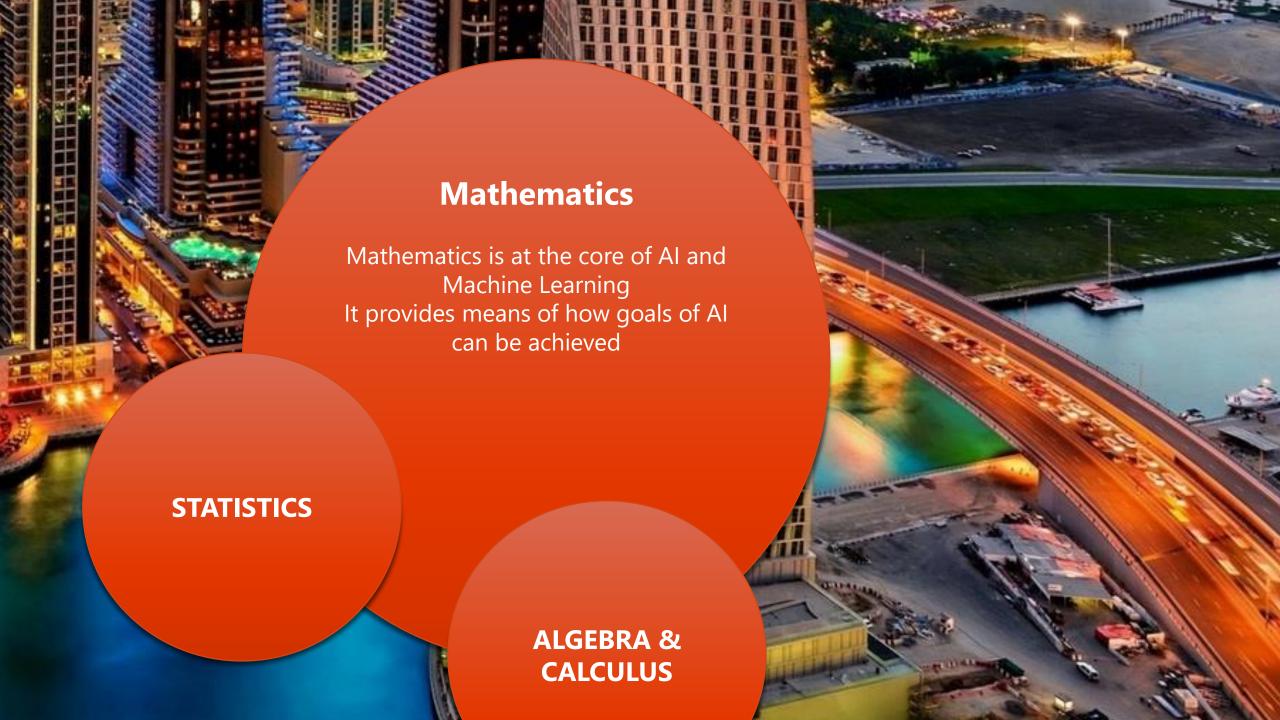
Flexibility

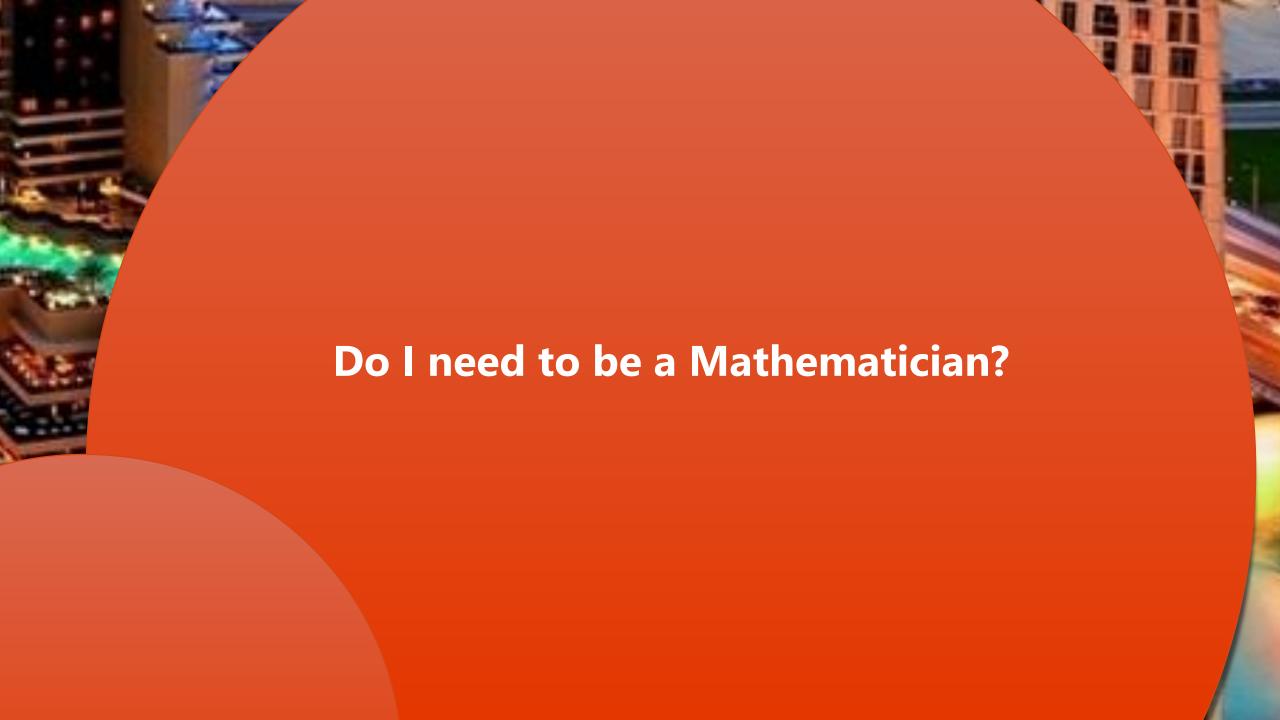
Popularity

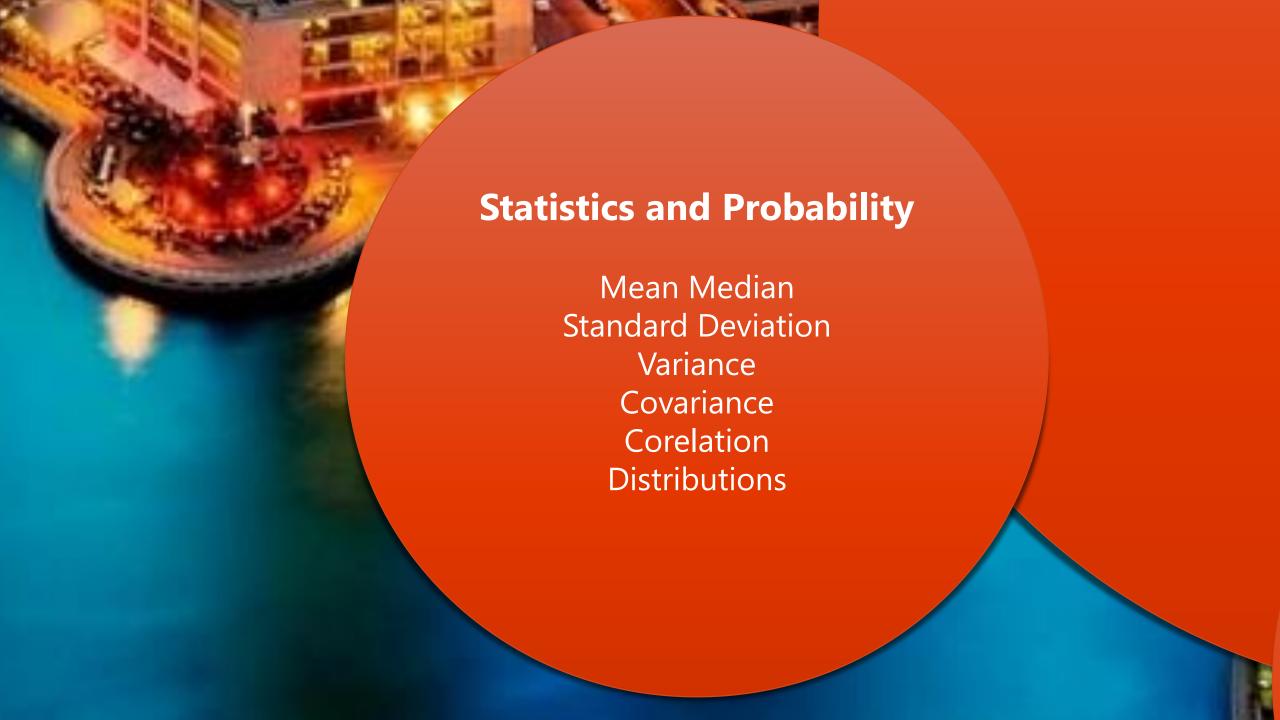


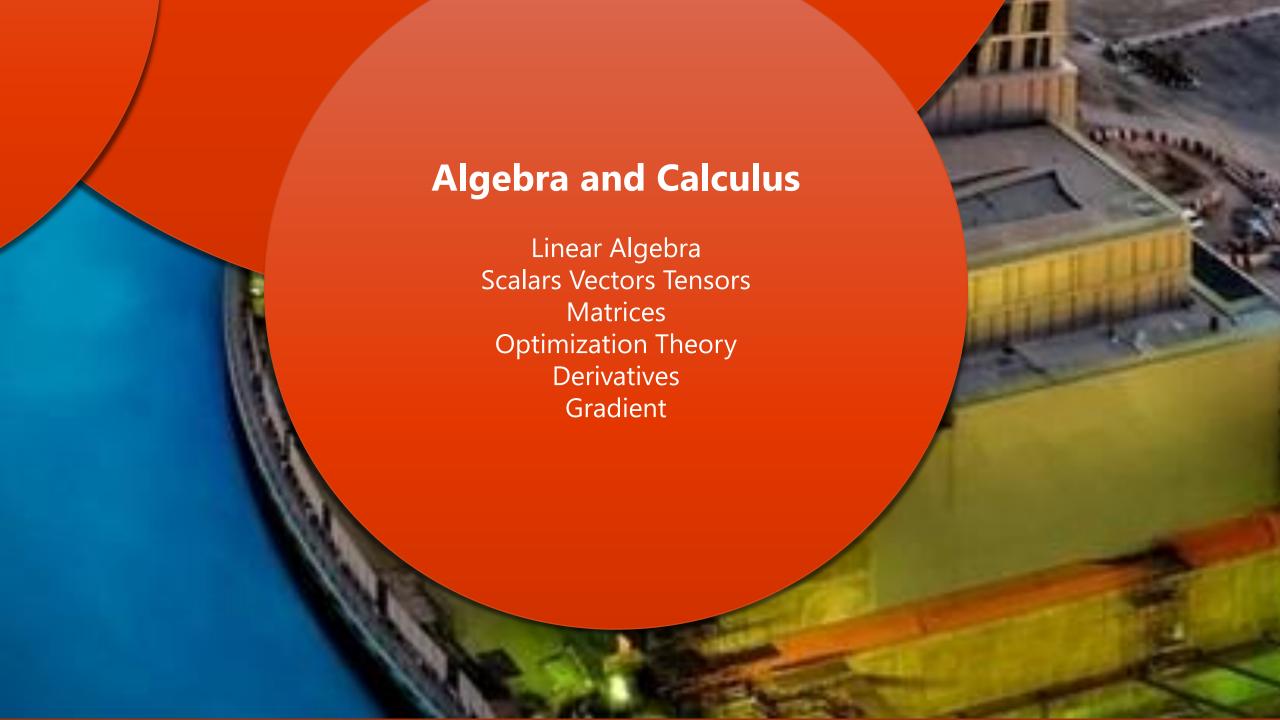
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NEXT WEEK

Detailed Math behind Classification and Regression & Loss Functions

Writing your "Hello World" in Machine Learning with python

Digging deeper into SciKit-Learn and TensorFlow

Creating and testing accuracy for your own version of Nearest Neighbors

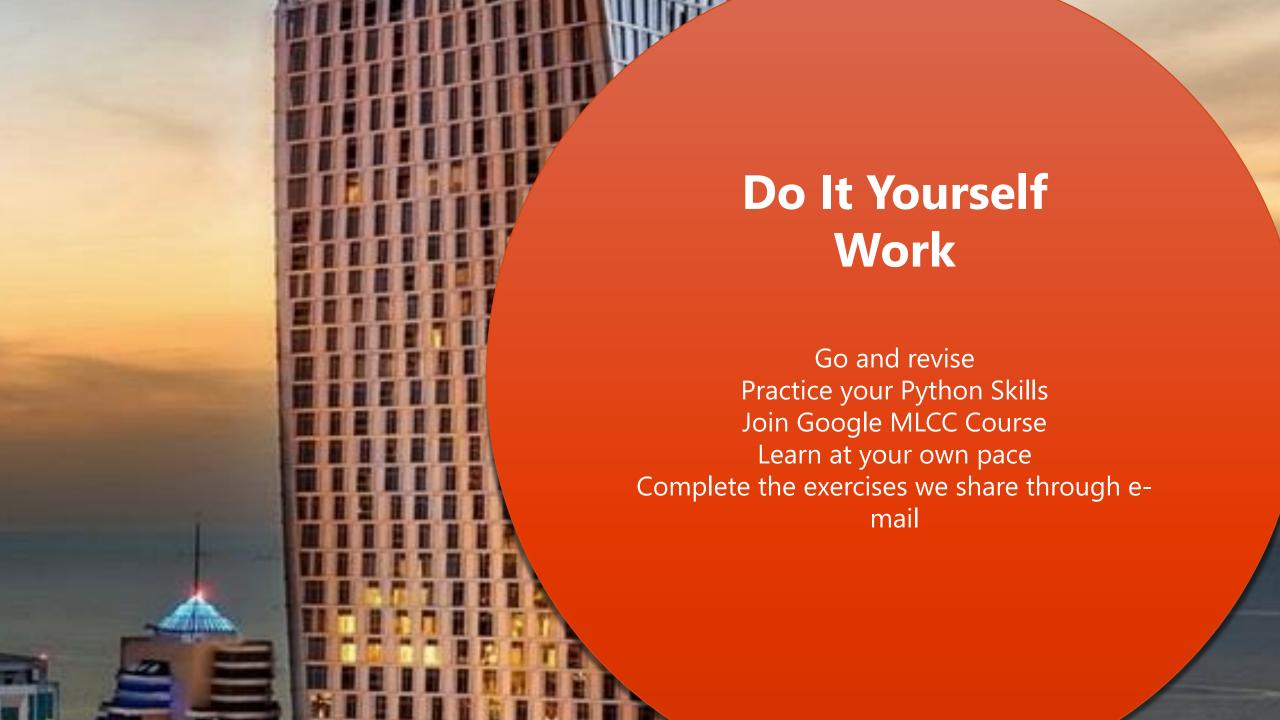
Classifier

And Much More...



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