BUT HOW?

Intelligence in the computers that is AI and neural networks is not same as the human brains, but different. So, never compare a computer with human brain in Data Science. They have different design. For example, you don’t need wings to fly.

Python does have a compiler version as well.

AI: Mimicking of human intelligence in a a machine.

Machine learning: Achieving AI by training algorithms using a lot of data.

Deep Learning: Machine learning inspired by Human brain.

Example:

We make a machine which differentiate the tomatoes and cherries. WE tell this machine the features that differentiate the tomatoes and the cherries like stem type, shape, size, and weight. This process is called Machine learning. Whereas deep learning is more complex since we feed a lot data like we make a brain (in machine) and we feed huge data and leave it on the brain itself to define differentiating criteria by leaning from the data.

Neurons: Core entity of a neural network.

There are 3 differnrent types of layers:

1. Input layers where data is feed.
2. Hidden layers connecting input and output layers
3. Output layers

All the layers are connected via channels through this data flows, which has a value associated with it. This there channels are also called weighted channels.

Turing test: Test that checks if something is a computer or a human.

Videos in lecture

First: [youtube.com/watch?v=6M5VXKLf4D4](https://www.youtube.com/watch?v=6M5VXKLf4D4)

Second: [youtube.com/watch?v=aircAruvnKk&t=237s](https://www.youtube.com/watch?v=aircAruvnKk&t=237s)

Third: [youtube.com/watch?v=X3paOmcrTjQ](https://www.youtube.com/watch?v=X3paOmcrTjQ)

[youtube.com/watch?v=jbkSRLYSojo&t=20s](https://www.youtube.com/watch?v=jbkSRLYSojo&t=20s)

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Lab Notes

We can develop either with notebooks or IDEs

Notebooks got really famous since they allow you to use small cells for codes and testing them, notebook files are interactive python (ipython).

In Anaconda Prompt:

Help(): Returns the function definition.

Function\_name?: displays you the Signature, Docstring

Function\_name??: Displays the function definition exactly like the function itselfh