Introduction Artifical Neural Networks (ANN)

Precondition
Before start check out:

You have read and understood
- Linear Regression
- Classification

If not look it up later.

The mission
In this lesson we will:

Introduce the concepts of ANN
Discuss Perceptrons
Introduce Multiple Layer Perceptrons
Introduce the kernel trick
See a real example

Outcome
After this lesson you have learned about:

ANN principles
Perceptrons
Backpropagation
MutiLevelPerceptrons (MLP)
MLP Classification
(MLP Regression)
Tensorflow
Keras
Real life cases:
- Iris, Fashion MINST

Playground.tensorflow.org

You will NOT learn about:
- Functional API
- Subclassing API
- Callbacks
- Hyperparameters
- TensorBoard
- CNN (Convolutional Neural Network)
- RNN (Recurrent Neural Network)

Next step
It is time for some assignments:

N/A: Discuss and answer theoretical questions in the assignment *"ANN Questions"*
Solve the 3 exercises in ANN.