

Part 2 Now creates the ANN

from tensorflow.keras.models import Sequential

from tensorflow.keras.layers import Dense

from tensorflow.keras.layers import LeakyReLU, PReLU, ELU, ReLU

from tensorflow.keras.layers import Dropout

Note:

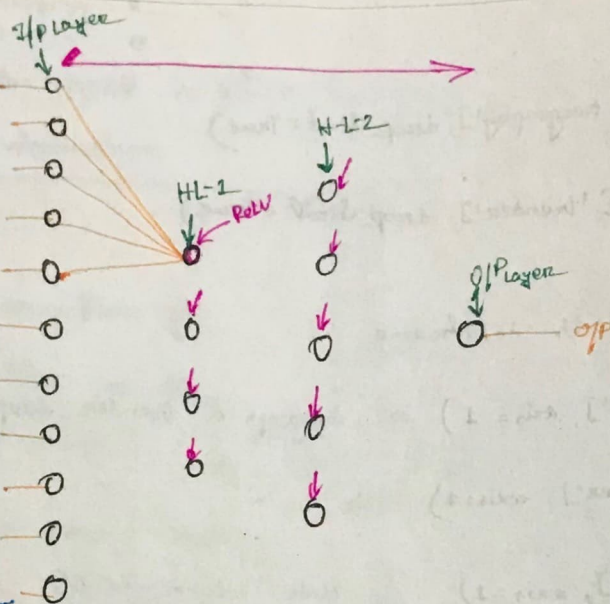
① Sequential

② Dense

③ Activation

④ Dropout

entire neural network at once as a block. It is sequential it's indicate F/W & B/W propagation.



For Dense Layer

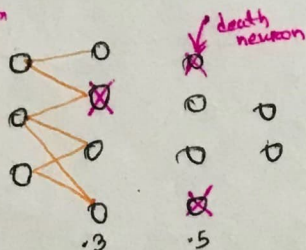
we able to create Hidden Layer, input layer and output layer

Activation functions → ReLU, ELU, PReLU, sigmoid, tanh, softmax, swish, Leaky ReLU

Dropout (Regularization parameter)

L1 Norm

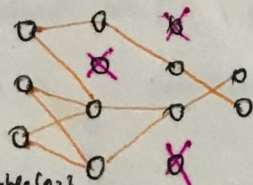
L2 Norm



Overfitting → Test Accuracy goes down ↓↓

Train Accuracy high ↑↑

Dropout = 0.3 it means 30% of the entire neurons that are present in this layer we will deactivate by training during the training purpose. This is called death neuron. It is reduce overfitting



Interview: explainable(AI)

Black Box vs White Box Model:

Random Forest → Black Box Model (ANN, Xgboost, CNN, RNN)

Decision Tree → White " " (Linear Reg)

we can't monitor & see all the weights. It is very difficult