2019103555 BMS Pranava Raman

25/10/2021

Machine learning Lab-08 - Observation

Activation functions

Aim:-

To implement various activation functions to the 'PIMA indian diabetes' dataset in MLP

Explanation

There are various activation functions for the perceptrons. These ensure differentiability and hence allow including extra layers.
Some of the popular functions are:-

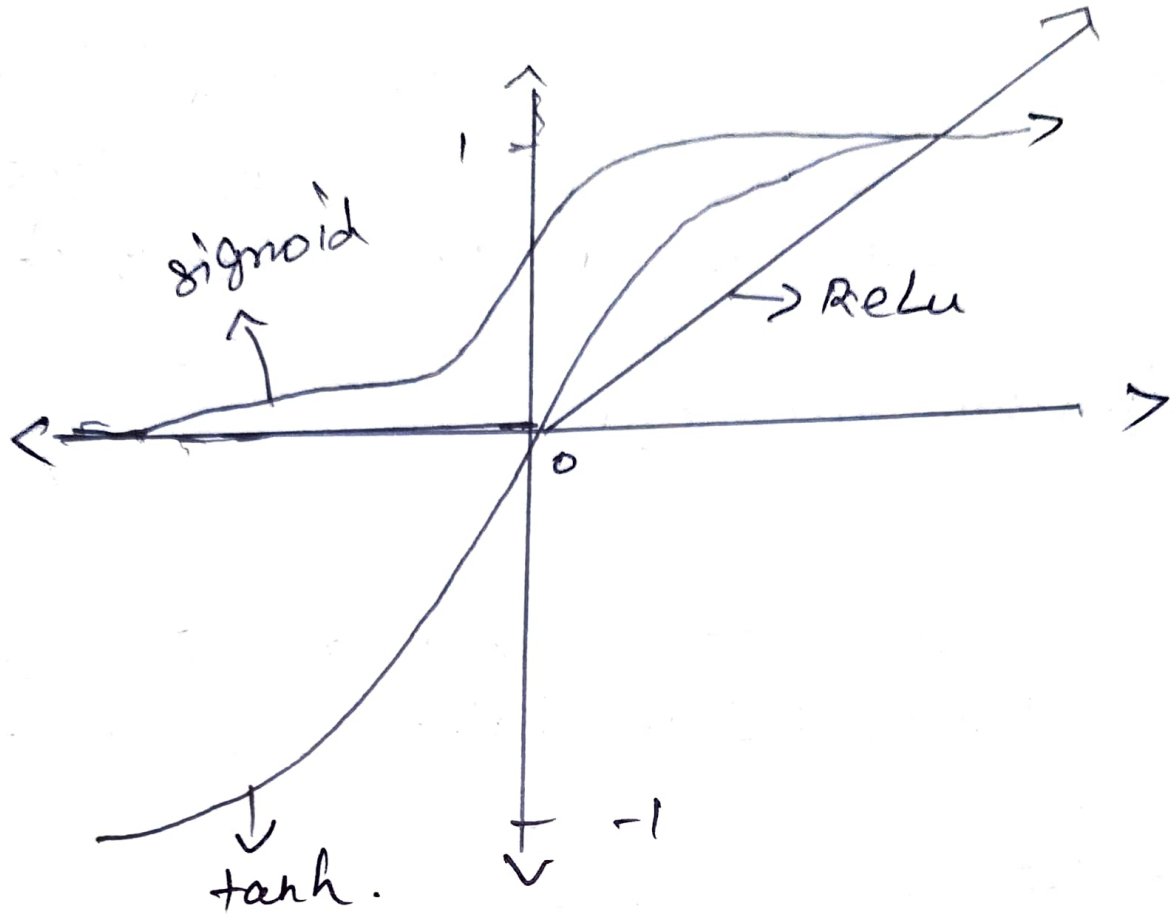
i) Sigmoid

$f(x) = \frac{1}{1+e^{-x}}$, This gives output in the range of [0, 1].

It is mainly used in models where we predict probability.

ii) Tanh activation function

This resembles very close to sigmoid, but has a range of [-1, 1].



iii) ReLu [rectified linear unit]

It is one of the most used activation function.

$R(x) = \max(0, x)$ It has a range of $[0, \infty)$