Jayathilaka H.A.D.T.T.

E/16/156

CO542

Neural Networks and Fuzzy Systems

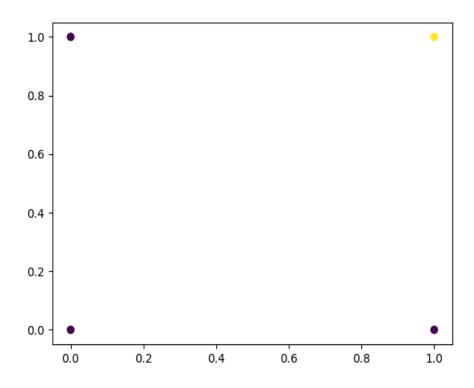
2021

Lab 03 - Introduction to Perceptron

Exercise 1

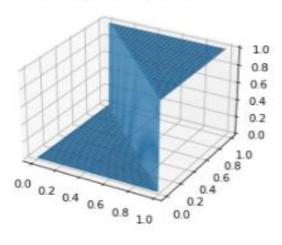
- 1. Demonstrate the capability of a single-layer perceptron to model the following logic gates: AND , OR , NOT.
- 2. Generate the output curves/surfaces for these perceptron models as the input/s vary continuously from 0.0 to 1.0 (hint: surface plots in python: surface plots.)

AND Gate

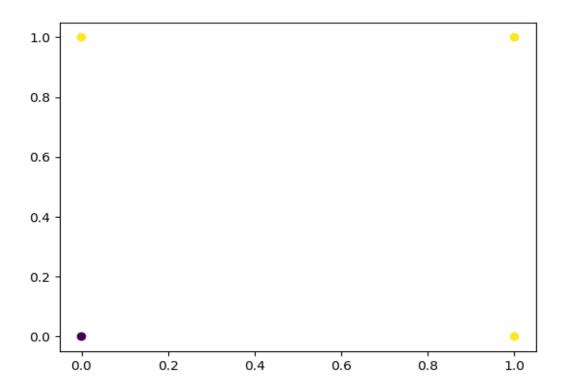


Output Surface for NOT Logic gate

AND Logic Gate Surface Plot

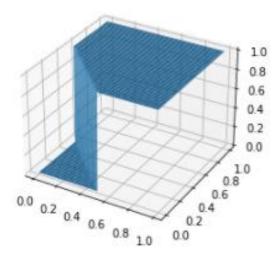


OR Gate

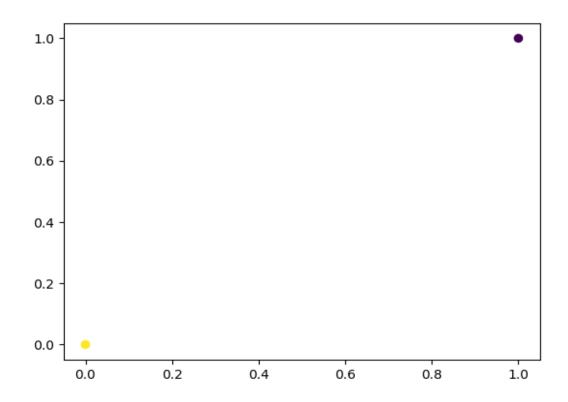


Output Surface for NOT Logic gate

OR Logic Gate Surface Plot



NOT Gate



Output Surface for NOT Logic gate

NOT Logic Gate Surface Plot

