

Computational Intelligence Report

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Dataset Introduction

Name : Hayes-Roth Data Set

Source : UCI machine Learning Repository

This is the link: <https://archive.ics.uci.edu/ml/datasets/Hayes-Roth>.

Attributes

Total **5** attributes

1 class label

4 attributes

Rows

There are total 132 instances

Neural Network

Layers in neural network in the project

With 2 hidden layers

Hyperparameters

1. First layer had 4 hidden units
2. Second layer had 3 hidden units

Activation functions used

1. Sigmoid :

$$\sigma(z) = \frac{1}{1 + e^{-(z)}}$$

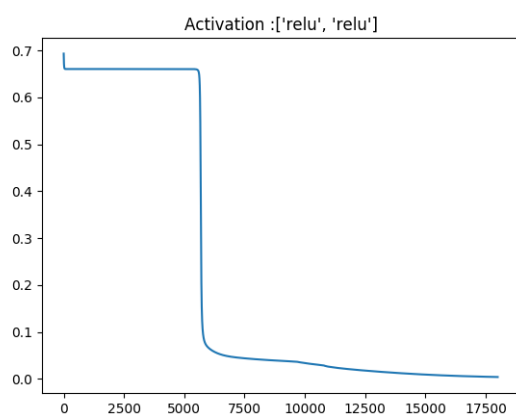
2. tanh :

$$\frac{e^z + e^{-z}}{e^z - e^{-z}}$$

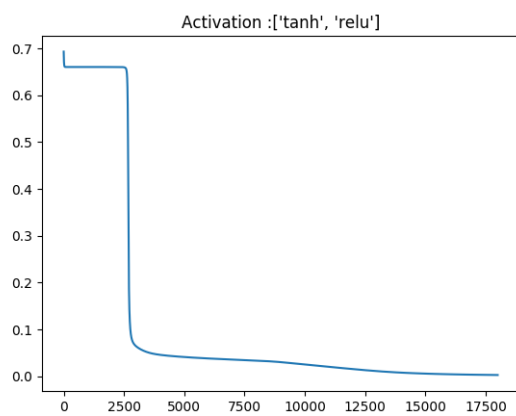
3. ReLu(Rectified Linear Unit)

$$\max 0, Z$$

Accuracy = 100%, ReLu-ReLu



Accuracy = 100%, Tanh-Relu



Accuracy = 100%, Tanh-Tanh

