Titanic: Machine Learning from Disaster

Program Guide

Environment Requirements

Required Software - MATLAB® (Version R2016a) with the Neural Network Toolbox™

How to run the code

1. Unzip the fie "TitanicNN.zip"
2. The folder will contain the following files;
    - Titanic.m – Code to train and test the Neural Network
    - myNeuralNetworkFunction.m – Code of the functions used to build the neural network
    - WorkspaceVariables.mat – Workspace variables to run the network
    - "Data" Folder containing;
        o Train_modified_INPUT.csv – Input matrix to train the network
        o Train_modified_TARGET.csv – Target matrix of input training data
        o Test_modified.csv – Testing data matrix
3. Open the file "Titanic.m" file in Matlab
4. Import data from "WorkspaceVariables.mat" to the network.
5. Run the code to retrain and test the network
6. The performance and prediction of probabilities of the test data will be displayed in the Command Window. Moreover, plots will demonstrate the performance of trained neural network.
7. The predicted survival of the passengers along with the passengerID will be saved in a separate file "Output.csv" in the TitanicNN folder after running the network.

K.K. de Silva - 2015s15400 - s12744
T.M. Hewavithana - 2015s15420 - s12764
W.G.A.S. Sandareka - 2015s15477 - s12819