Backpropagation Coursework Report

# Data Pre-processing

To pre-process my data I initially copied all the data into a text file and constructed a python script to determine outliers and missing data, and then convert the raw data into usable lists of floats. Once I had determined which data was missing, I interpolated to replace missing data and outliers which I deemed to be excessive within excel.

I have plotted the raw data into figure 1 below:

Chart

Description automatically generated

Figure

After replacing missing data and interpolating outliers (Fig.2) which I deemed to be excessive, the dataset became much more usable.

Chart, line chart, histogram

Description automatically generated

Figure

I then standardised the data within the range 0.1-0.9 to ensure that data which naturally has a high value doesn’t mask the other data in the set.

Chart, bar chart, histogram

Description automatically generated

Figure

Finally, I split my data into training, validation and test sets to be used for training.

# Implementation



# Training and Network Selection

# Evaluation

# Comparison