**Report**

**Neural Network - Mini-Project Number 1:  
 Adaline algorithm, Backpropagation algorithm**

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Section 1:**

**Time it took to train the final model**

In our project we implemented the Adaline and Backpropagation algorithms, and checked the results by splitting the data into 2 parts:   
66% of the data was used for training the algorithms, and the remaining 33% was used for testing (did not participate in model training).

In addition, we did a cross-validation process by changing the, i.e we've change the 33% choice 3 times and get 3 results.

The average of these 3 results: 0.75-

- The standard derivation: 0

- The time it took to train the final model (after all the cross-validation processes): \_\_\_\_\_

**Section 2:**

**Ease of parameter search/adaptation**

**Section 3:**

**Performance on the training set and on the testing set, and explanation of the results**

* Confusion matrix for the first evaluation

|  |  |  |
| --- | --- | --- |
|  | **Predicted: yes** | **Predicted: no** |
| **Actual: yes** | **True Positive (mean+/-std)** | **False Negative** |
| **Actual: no** | **False Positive** | **True Negative** |

* Confusion matrix for the second evaluation

|  |  |  |
| --- | --- | --- |
|  | **Predicted: yes** | **Predicted: no** |
| **Actual: yes** | **True Positive (mean+/-std)** | **False Negative** |
| **Actual: no** | **False Positive** | **True Negative** |

* Confusion matrix for the third evaluation

|  |  |  |
| --- | --- | --- |
|  | **Predicted: yes** | **Predicted: no** |
| **Actual: yes** | **True Positive (mean+/-std)** | **False Negative** |
| **Actual: no** | **False Positive** | **True Negative** |

### add pictures, charts, graphs …

**Section 4:**

**Summary and discussion of process/ problem**