**Paper format**

Discussion on Brain EEG signal interpretation using ML techniques

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Abstract

Introduction

## add the past work , a table of attained accuracy on the different datasets.

Experiment and Observations

## several sections here.

1. Model selection rationale
   1. Which models were selected and why ??
      1. Discuss the properties. And how that relates to the brain signals.
2. Emotion recognition Dataset.
   1. Discuss the significance of
   2. Discuss the structure and the sampling method of this thing/
   3. Discuss the preprocessing that has been used.
   4. Discuss the size of the dataset.
   5. Show the results in a tabular format.
3. MNIST digits dataset
   1. Discuss the significance of
   2. Discuss the structure and the sampling method.
   3. There’s no significant preprocessing , discuss if there is
   4. Discuss the size of the dataset,
   5. Discuss why was this selected for study .
   6. Show results.

Discussions

1. Discuss why there was a good result for the Emotions dataset and why wasn’t it the case for the mnist dataset.
2. Discuss why lstm wasn’t properly workking ,
3. Discuss why the nn gave the best performance and not the CNN or LSTM.
4. Discuss the location of the sensors and their relation with the stimuli. (or maybe discuss it in the experiment section.

Conclusion -

Just summaries the discussion and restate the attained accuracies.

References -

1. Get the torch.nn library reference.
2. The website
3. The kaggle link for the dataset.
4. The link of the emotions paper
5. The link of the mindbigdata paper.
6. The muse 2 image link
7. And a few other that help discuss the relationship between the sensor locations andd the stimuli

Images to include -

1. Get the decision tree for emotion dataset.
2. Get the confusion matrix for the best dataset on the emotions things
3. Get hte confusion matrix for the best database ton the mnist dataset.
4. Image of muse 2
5. Image of sensor location
6. Model architecture for NN, CNN, and the LSTM network.
7. Get an image of the sample data from both the dataset. S

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**References**