# Assignment 2

### https://github.com/eduzamora10/FFNN-RNN-A2

# Group 15 Eduardo Zamora eaz200000

#### 1. Introduction and Data

**TODO:** Briefly describe the project and your main experiments and results, including mentioning

the data you use.

**TODO:** Briefly describe task and data (e.g. how many examples are in the training, develop-

ment, and test sets.), it is best to report all the statistics, including counts, in a table

# 2. Implementation

#### **2.1 FFNN**

**TODO:** Explain briefly how you implemented filled in the incomplete code for FFNN.py in the

form of screenshot (and explanations) in the report. Provide any other libraries/tools that are

used; Try to understand what other part of the code is doing, and write your understandings here

(e.g. optimizers, initializations, stopping, etc.)

#### **2.2 RNN**

**TODO:** Explain briefly how you implemented filled in the incomplete code for RNN.py in the

form of code-snippet screenshot (and explanations) in the report. Try to understand what other

part of the code is doing, and write your understandings here (especially parts that is functioning

differently as compared to FFNN).

## 3. Experiments and Results

**Evaluations (15pt) TODO:** Explain how you evaluate the models. What metric is used – you

can refer to the current implementation.

**Results (30pt) TODO:** Apart from the default hyperparameters, try multiple variations (be-

tween 1-2 for FFNN and RNN each) of models by changing hidden unit sizes.

TODO: Summarize the performance of your system and Put the results into tables or diagrams

and include your observations and analysis.

# 4. Analysis

#### **TODO:**

- (1pt) Plot the learning curve of your best system. The curve should include the training loss and development set accuracy by epoch.
- (1pt) Error analysis. List some (one or more than one) error examples and provide some analysis. How might you improve the system?

#### 5. Conclusion and Others

#### **TODO:**

- Individual member contribution.
- Feedback for the assignment. e.g., time spent, difficulty, and how we can improve.