Steps to use my model:

- Switch to the pytorch_latest_p36 environment
- Put data files in the same directory as the main.py
- Create a folder called “main{}trial{}” in the same directory, the numbers should be consistent with the ones in main.py
- Run “Python3 main.py”
- You can check which model has the best performance in the main{}trial{} folder and copy the file name to the checkpoint variable at the bottom of main.py
- Uncomment the lines under “Predict” and only run those lines to get the prediction file.

Architecture:

Minimum baseline: This should get to ~25 mean Levenshtein distance within 20-30 epochs

- Model:
    - CNN:
        - Conv1d
        - BatchNorm1d
        - ReLU
    - RNN - BiLSTM:
        - hidden size 512
        - Num_layers 4
        - Dropout 0.2
        - Locked dropout around rnn
    - Linear
- optimizer Adam
    - weight decay 1.2e-6
- learning rate 1e-3
    - ReduceLROnPlateau: factor=0.7, patience=3
- Batch size: 64