

CS571-Name Entity Recognition

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1 Introduction

The task is to develop a deep learning model that takes each sentence and do name entity recognition for each token. The model is bi-lstm model.

2 RNN Structure

2.1 Input

Padding the sentence to maximum sentence length: 113 Embedding dimension: 50 The input size is (batchsize, 113, 50)

2.2 BiLSTM

Used Keras BiLSTM module Bidirectional(LSTM(...))

2.3 Output

The final layer is a TimeDistributed dense layer with parameter 17 (the total classes of Name entities). The activation function for this layer is softmax.

3 Result

After running 15 epochs, the final model achieved an F1 SCORE of 93.07% on the training dataset and 90.68% on the developing dataset.