

# Weekly Report (12/02/16)

## Progress this week:

1) **Read the paper.** *Deep Learning for NLP*. Key phrases: Language Models. RNN. Bi-directional RNN. Deep RNN. GRU. LSTM. First of all, the problems of Vanishing Gradient and Gradient Explosion is new to me. And learning the ways to solution the question.

2) **See the Structure of Networks.** The important work of this weekly is adjustment algorithm. The algorithm to compensate for the first in the sort of contingent factors. The effect of the low-level node of the node linked is added here. Secondly, some properties of complex network structure are calculated by Python programming.

Average path length is a concept in network topology that is defined as the average number of steps along the shortest paths for all possible pairs of network nodes. In graph theory, a clustering coefficient is a measure of the degree to which nodes in a graph tend to cluster together.

3) **Unfortunate News.** In the last two weeks, I have tried to find the application of the feature map that I have drawn before. Unfortunately, research on complex networks now relies on connection matrices to deal with problems. The prediction of the link and the solution of complex network grouping, the current algorithm can not be solved. Regarding the grouping of complex networks, I used a mixture of two small world networks, and then used image observations. The nodes in the image are mixed.

However. The pre-algorithm seem to have a unique effect for graphics compression of complex network. Comparing complex network parameters of the original image compression and transformation matrix image, there is a good trend. These parameters are covered in the previous section. Now the question is how to debug the size of the operator in order to be able to find the most perfect network compression effect.

## Plan next week:

1) Read paper: Neural Machine Translation by Jointly learning to Align and Translate.

2) Attempt to build the LINUX platform for Deep Learning.

## This week's results:

The result of this week is to validate some of the wrong ideas, and to reinforce the previous algorithm. Code debugging.