

## Semester Project – Weekly report

21/03 to 28/03

Title: Extending Dynamic Structure in Memory Network for Response Generation

Teacher: Faltings Boi

Supervisor : Mi Fei

Student: André Cibils

### 1. Goal of the passed week:

1. Think about ways to implement the encoder/decoder architecture in DMN
2. Familiar myself more with Theano
3. Search for dataset – read info about the babi (6) dataset
4. Read the article: Learning End to End Goal oriented dialog

### 2. Work done & problems encountered::

I created an additional mode, minitest, which test for only one session and display the facts, the question and the response. Not really useful but I think it can help to see the progress of the sentence generation.

I modified the structure in order to generate multiple words. The number of words is a parameter right now, but I think this should be some conditional stuff. I tested it with task 14 and obviously, without the proper dataset, it only outputs multiple copy of the same word. Interestingly enough, YerevaNN didn't implemented that: the answer module only did one step. However, it is worth mentioning that it doesn't always improve the results.

I also read the dataset a bit, and as I told you, it doesn't look so well. Before using it, maybe we should add some token so the model know if it's its responses or user's sentences.

### 3. Potential goal for next week:

I don't really know where to go next. Maybe modify the dataset a bit and use it right away? I didn't modify the cost function, so this should probably be the way to go as well.

### 4. Note

This week will be intense, I have quizzes and due to personal engagment my week-end is full. I'll try to compensate.