

## 7.18 Meeting Agenda

### 1.是inference还是Condition group truth （是Teacher Forcing么）

目前两个都做了，但是inference的效果很差。

存在的问题：

1.inference的句子不是句子（语法，单词的单个重复率很高），是否考虑采用 **beam search**

2.Teacher Forcing：生成的句子是句子，但是语法存在一定的问题，另外对于给定的动词+名词没有很好的控制——不能生成相应的story。

### 2.关于loss很低的问题：

根据gluon的例子里面，该loss很低，对于代码中的loss计算有疑惑。

[http://zh.gluon.ai/chapter\\_natural-language-processing/machine-translation.html](http://zh.gluon.ai/chapter_natural-language-processing/machine-translation.html)  
LN[10]中的代码

存在的问题：

- 1.样本与loss的关系，样本较大时，loss会很大
- 2.当不加入teacher forcing时 loss下降的很慢

### 3.选模型？选LSTM/GRU/RNN

### 4.对于baseline的结果进行分析：

**Baseline:**<https://github.com/AbnerCode/Text-Generation/tree/master/Baseline>

- 1.不同的输入却得到了相同的故事（argmax的原因？）
- 2.故事生成的句子不符合语法
- 3.给定的输入（动词+名词），输出与其不相关的故事

### 5.gru替换lstm时存在的问题 :lstm+attention：

代码存在问题

代码：[https://github.com/AbnerCode/Text-Generation/blob/master/gluon\\_st.py](https://github.com/AbnerCode/Text-Generation/blob/master/gluon_st.py)

### 6.关于decoder：

$$p(w_t|w_1^{t-1}, \mathbf{h}^k; \theta) = g(V^l s_t) \quad (5a)$$

$$s_t = \mathcal{F}^{\text{att}}(w_{t-1}, s_{t-1}, c_t) \quad (5b)$$

$$c_t = \sum_{j=1}^r \alpha_{tj} h_j^k \quad (5c)$$

$$\alpha_{tj} = \frac{\exp(a(s_{t-1}, h_j^k))}{\sum_{p=1}^r \exp(a(s_{t-1}, h_p^k))} \quad (5d)$$

1. Paper如何根据相应的词语生成的故事
2. 改变抽取词语的策略?
3. 给予输入给定一定的权重, 提高对于inputs的理解 (想法)

Users' Storyline	Generated Story
john angry meeting park happy	john was a very angry person. he was angry at his job. john decided to go to the park. john went to the park. john was very happy with his new job.
john angry meeting park wolf	john was very angry. he had a meeting at the park. he went to the park. he saw a wolf. john was very angry.
jennifer angry meeting park happy	jennifer was very angry. she had a meeting at the park. jennifer was not happy. she went to the park. jennifer was happy to be meeting her friend.
jennifer angry meeting park wolf scared	jennifer was very angry. she had a meeting at the park. she went to the park. she saw a wolf. jennifer was very angry.

## 7. 下一步的改进