Deep Q-Learning for NLP

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1 Brain Dump

Input Data: Streaming Queries from the time of query until an hour before the time of query.

Step 1: ?

Step 2: ?

Output: Summarization of relevant Queries.

Last hidden layer of an LSTM-RNN will be a k-dimensional embedding of a given sentence.

Use Deep Q Learning framework based on [2] and [1].

2 Useful Links

http://trec.nist.gov/

References

[1] Volodymyr Mnih, Adrià Puigdomènech Badia, Mehdi Mirza, Alex Graves, Timothy P. Lillicrap, Tim Harley, David Silver, and Koray Kavukcuoglu. Asynchronous methods for deep reinforcement learning. *CoRR*, abs/1602.01783, 2016.

[2] Volodymyr Mnih, Koray Kavukcuoglu, David Silver, Alex Graves, Ioannis Antonoglou, Daan Wierstra, and Martin A. Riedmiller. Playing atari with deep reinforcement learning. *CoRR*, abs/1312.5602, 2013.