3/18 Paper Intro

+ Paper Report Questions

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Outline

1. Mogrify LSTM

2. SBERT-WK

3. Generalization through Memorization: Nearest Neighbor Language Models

4. Differentiable Reasoning over a Virtual Knowledge Base

Title

MOGRIFIER LSTM

Gábor Melis[†], Tomáš Kočiský[†], Phil Blunsom^{†‡}

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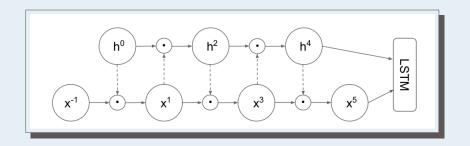
DeepMind, London, UK

[‡]University of Oxford

Mogrify LSTM - Motivation

- 1. Improve Generalization ability of Language Model
- 2. Amplify salient and attenuate nuisance features in the input embeddings
- 3. Context-free representation is a bottleneck in LM
- 4. conditioning the input embedding on the recurrent state will improve performance.

Mogrify LSTM - Model



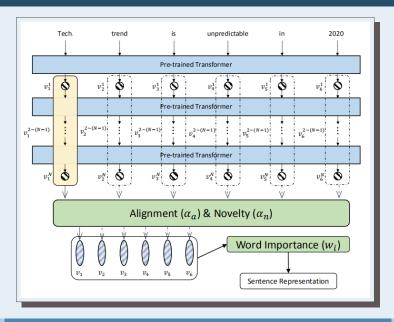
Mogrify LSTM - partial Experiments

Mogrify LSTM - Insight

Title

SBERT-WK - Motivation

SBERT-WK - Model



SBERT-WK - partial Experiments

SBERT-WK - Insight

Title

knn-LMs - Motivation

knn-LMs - Model

knn-LMs - parital Experiments

knn-LMs - Insight

Title

Recap