MM601: Take-home Assignment 1

Dai Yao (dai@yaod.ai; dai@mle.bi)

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1 Chen et al. (2017)

The set of model parameters in this paper is: $\{L, \hat{B}^S, Q, B^S, B\}$, and each element in this set itself is a collection of various parameters.

- Based on the notation, please specify the focal model in the paper (i.e., MCH), the UCH model, as well as the FM model. Please also briefly discuss their differences.

- In Section 2.3 (page 142), right above Assumption 1 (A1), the authors said that "a closer examination reveals that learning $\{B^S, B\}$ is sufficient, as ..." Please explain why.

2 Text Embeddings

Please describe the similarities (one to two aspects) and main differences (one to two aspects as well) between the two major approaches to construct text embeddings: Dhillon and Aral (2021), and Ansari, Li, and Zhang (2018).