Part IV: Conclusion

Zhongyuan Wang (Microsoft Research)

Haixun Wang (Facebook Inc.)

Tutorial Website:
http://www.wangzhongyuan.com/tutorial/ACL2016/Understanding-Short-Texts/

Takeaways

- **Short text understanding** is challenging because of it is *sparse, noisy*, and *ambiguous*

- **Short text understanding** can benefit lots of applications such as *search engines, automatic question answering, online advertising, recommendation systems,* and *conversational bot*.

Takeaways

- **Explicit short text understanding**: using *semantic networks* or *knowledge bases* for short text *segmentation*, *sense disambiguation*, *syntax structure*, and *semantic similarity*
  - Single instance
    - Is this instance ambiguous?
    - What are its basic-level concepts?
    - What are its similar instances?
  - Short text
    - How to segment this short text?
    - What does this short text mean (its intent, senses, or concepts)?
    - What are the relations among terms in the short text?
    - How to calculate the similarity between short texts?

Takeaways

- **Implicit short text understanding**: leverage *big data* and *learning based techniques* (especially deep learning) to model *latent semantic representation* for short texts
  - Word level
    - With Distributional Hypothesis
    - Without Distributional Hypothesis
  - Phrase/ Short Text Level
    - Using contextual knowledge
    - Using External Knowledge
  - Short Text/Sentence Level
    - Composition Models
    - Non-Composition Models

Contacts

- Zhongyuan Wang, Microsoft Research (wzhy@outlook.com; zhy.wang@microsoft.com)

- Haixun Wang, Facebook Inc. (haixun@fb.com)

- News:
  - Microsoft Research will release their data and model for short text understanding in *Aug./Sept. 2016*