Neural Network Models for sentence pair modeling

Rui Zhang

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For the Math 179 Mathematics of Big Data project, I plan to study the code and algorithm for one or more sentence pair modeling for natural language processing mentioned in the paper [1], including Semantic Textual Similarity, Paraphrase Identification, and Natural Language Inference. I would use its corresponding Github site: `https://github.com/lanwuwei/SPM_toolkit` to study the code and algorithm of those model.

For the midterm part of the project, I plan to finish the studying of at least one model discussed in the paper. Then, I could apply one or more model on other datasets in the final project, or even present some comparison of different models if I could learn that much.

References

[1] Xu W. Lan, W. Neural network models for paraphrase identification, semantic textual similarity, natural language inference, and question answering. *arXiv preprint*, 2018.