Graduate School of Science and Technology Master's Thesis Abstract

Laboratory name (Supervisor)	Natural Language Processing (WATANABE TARO (Professor))		
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Thesis title	Document-level Simplification Evaluation Metric based on Pre-trained Language Model and Optimal Transport		
Abstract			

With the development of document simplification studies, trustworthy metrics for evaluation measuring the quality of simplified document is becoming increasingly important.

Various automatic evaluation metrics based on N-gram overlap have been proposed for simplification. However, they failed to measure the quality of the simplified documents from the meaning-preserving and conciseness perspectives. Meanwhile, whether the simplified document concisely conveyed the primary idea from the original one is a critical criterion for evaluating the quality of the simplified document.

Therefore, we proposed a new automated evaluation metric for document-level simplification, which is based on a pre-trained language model and Optimal Transport. It is proved that this new metric has a higher correlation with the human judgment rate compared to the existing document-level simplification metric.