

先端科学技術研究科 修士論文要旨

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要旨			
<p>Recently, thanks to the advent of neural networks, the performance and flexibility of text and image generation have been improved and are being used in many places, e.g., Google Translator, DeepL Translator, and Grammarly.</p> <p>It is reported that grammatical information is useful for text generation tasks, e.g., machine translation, summarization, and grammatical error correction. Moreover, grammatical information can approach to solve the interpretability problems caused by neural network models. However, the annotation of grammatical information demands huge human and time costs, and it is hard to use grammatical information in text generation tasks. Therefore, a new approach is needed to generate the grammatical information in the low resource setting and use them for generation tasks.</p> <p>In this paper, to improve the performance and interpretability of generation tasks, we introduce our works that the neural machine translation model with unsupervised syntactic structure. We demonstrate that our approaches produce better performance and interpretability than the baseline model in the machine translation task, which is one of the generation tasks, with some language pairs. Therefore, our approaches do not require a huge syntactic corpus and can be applied easily in any language.</p>			