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cases	**authors** • Wei Wang • Bin Bi • Ming Yan • Chen Wu • Zuyi Bao • Jiangnan Xia • Liwei Peng • Luo Si **title** StructBERT: Incorporating Language Structures into Pre-training for Deep Language Understanding **publication_date** 2019-08-13 00:00:00 **source** SupportedSources.OPENALEX **journal** arXiv (Cornell University) **volume** **doi** None **urls** • https://openalex.org/W2966892770 • http://arxiv.org/pdf/1908.04577 **id** id-4145271857151609018 **abstract** **versions**	**authors** • Wei Wang • Bin Bi • Ming Yan • Chen Wu • Zuyi Bao • Jiangnan Xia • Liwei Peng • Luo Si **title** StructBERT: Incorporating Language Structures into Pre-training for Deep Language Understanding **publication_date** 2019-08-13 11:12:58+00:00 **source** SupportedSources.ARXIV **journal** None **volume** **doi** **urls** • http://arxiv.org/pdf/1908.04577v3 • http://arxiv.org/abs/1908.04577v3 • http://arxiv.org/pdf/1908.04577v3 **id** id8261676406615415539 **abstract** Recently, the pre-trained language model, BERT (and its robustly optimized version RoBERTa), has attracted a lot of attention in natural language understanding (NLU), and achieved state-of-the-art accuracy in various NLU tasks, such as sentiment classification, natural language inference, semantic textual similarity and question answering. Inspired by the linearization exploration work of Elman [8], we extend BERT to a new model, StructBERT, by incorporating language structures into pre-training. Specifically, we pre-train StructBERT with two auxiliary tasks to make the most of the sequential order of words and sentences, which leverage language structures at the word and sentence levels, respectively. As a result, the new model is adapted to different levels of language understanding required by downstream tasks. The StructBERT with structural pre-training gives surprisingly good empirical results on a variety of downstream tasks, including pushing the state-of-the-art on the GLUE benchmark to 89.0 (outperforming all published models), the F1 score on SQuAD v1.1 question answering to 93.0, the accuracy on SNLI to 91.7. **versions**	NOT DUPLICATES	430