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	id	id-6493339733811671171	**abstract**	The success of pre-trained word embeddings has motivated its use in tasks in the biomedical domain. The BERT language model has shown remarkable results on standard performance metrics in tasks such as Named Entity Recognition (NER) and Semantic Textual Similarity (STS), which has brought significant progress in the field of NLP. However, it is unclear whether these systems work seemingly well in critical domains, such as legal or medical. For that reason, in this work, we propose an adversarial evaluation scheme on two well-known datasets for medical NER and STS. We propose two types of attacks inspired by natural spelling errors and typos made by humans. We also propose another type of attack that uses synonyms of medical terms. Under these adversarial settings, the accuracy of the models drops significantly, and we quantify the extent of this performance loss. We also show that we can significantly improve the robustness of the models by training them with adversarial examples. We hope our work will motivate the use of adversarial examples to evaluate and develop models with increased robustness for medical tasks.		
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