	doc_1		doc_2		decision id	
	authors	 Yung-Sung Chuang Rumen Dangovski Hongyin Luo Yang Zhang Shiyu Chang Marin SoljaÄić Shang-Wen Li Wen-tau Yih Yoon Kim James Glass 	authors	 Yung-Sung Chuang R. Dangovski Hongyin Luo Yang Zhang Shiyu Chang M. Soljavci'c Shang-Wen Li Wen-tau Yih Yoon Kim James R. Glass 		
	title	DiffCSE: Difference-based Contrastive Learning for Sentence Embeddings	title	DiffCSE: Difference-based Contrastive Learning for Sentence Embeddings	i	
	publication_date 2022-04-21 00:00:00 publica		publication da	ate 2022-04-21 00:00:00		
cases	source	SupportedSources.INTERNET_ARCHIVE	source	SupportedSources.SEMANTIC_SCHOLAR	d	
	journal		journal	ArXiv		
	volume		volume	abs/2204.10298		
	doi		doi	10.48550/arXiv.2204.10298		
	urls	• https://web.archive.org/web/20220430152837/https://arxiv.org/pdf/2204.10298v1.pdf	urls	https://www.semanticscholar.org/paper/fb8c9eeec8e9c1fa8d07edcb1f71da95beaa02dd		
	id	id7725277092281625868	id	id1535322769492265274		
	abstract	We propose DiffCSE, an unsupervised contrastive learning framework for learning sentence embeddings. DiffCSE learns sentence embeddings that are sensitive to the difference between the original sentence and an edited sentence, where the edited sentence is obtained by stochastically masking out the original sentence and then sampling from a masked language model. We show that DiffSCE is an instance of equivariant contrastive learning (Dangovski et al., 2021), which generalizes contrastive learning and learns representations that are insensitive to certain types of augmentations and sensitive to other "harmful" types of augmentations. Our experiments show that DiffCSE achieves state-of-the-art results among unsupervised sentence representation learning methods, outperforming unsupervised SimCSE by 2.3 absolute points on semantic textual similarity tasks.	abstract	We propose DiffCSE, an unsupervised contrastive learning framework for learning sentence embeddings. DiffCSE learns sentence embeddings that are sensitive to the difference between the original sentence and an edited sentence, where the edited sentence is obtained by stochastically masking out the original sentence and then sampling from a masked language model. We show that DiffSCE is an instance of equivariant contrastive learning, which generalizes contrastive learning and learns representations that are insensitive to certain types of augmentations and sensitive to other "harmful†types of augmentations. Our experiments show that DiffCSE achieves state-of-the-art results among unsupervised sentence representation learning methods, outperforming unsupervised SimCSE by 2.3 absolute points on semantic textual similarity tasks.		
	versions		versions			