

cases	doc_1		doc_2		decision	id
	authors	<ul style="list-style-type: none">Zhu, Q.Zheng, G.Yan, Y.	authors	<ul style="list-style-type: none">Qiuyu ZhuGuohui ZhengYingying Yan	DUPLICATES	90
	title	Effective Out-of-Distribution Detection in Classifier Based on PEDCC-Loss	title	Effective Out-of-Distribution Detection in Classifier Based on PEDCC-Loss		
	publication_date	2022-08-02 00:00:00	publication_date	2022-04-10 00:00:00		
	source	SupportedSources.CROSSREF	source	SupportedSources.INTERNET_ARCHIVE		
	journal		journal			
	volume		volume			
	doi	10.1007/s11063-022-10970-y	doi			
	urls	<ul style="list-style-type: none">https://link.springer.com/content/pdf/10.1007/s11063-022-10970-y.pdfhttps://link.springer.com/article/10.1007/s11063-022-10970-y/fulltext.htmlhttps://link.springer.com/content/pdf/10.1007/s11063-022-10970-y.pdfhttp://dx.doi.org/10.1007/s11063-022-10970-y	urls	<ul style="list-style-type: none">https://web.archive.org/web/20220622025444/https://arxiv.org/ftp/arxiv/papers/2204/2204.04665.pdf		
	id	id-9043264133556128739	id	id5464414911523941198		
	abstract		abstract	Deep neural networks suffer from the overconfidence issue in the open world, meaning that classifiers could yield confident, incorrect predictions for out-of-distribution (OOD) samples. Thus, it is an urgent and challenging task to detect these samples drawn far away from training distribution based on the security considerations of artificial intelligence. Many current methods based on neural networks mainly rely on complex processing strategies, such as temperature scaling and input preprocessing, to obtain satisfactory results. In this paper, we propose an effective algorithm for detecting out-of-distribution examples utilizing PEDCC-Loss. We mathematically analyze the nature of the confidence score output by the PEDCC (Predefined Evenly-Distribution Class Centroids) classifier, and then construct a more effective scoring function to distinguish in-distribution (ID) and out-of-distribution. In this method, there is no need to preprocess the input samples and the computational burden of the algorithm is reduced. Experiments demonstrate that our method can achieve better OOD detection performance.		
	versions		versions			