cases	doc_1		doc_2		decision	id
	authors	• Pierre Thodoroff • Joelle Pineau • Andrew Lim	**authors**	• Pierre Thodoroff • Joelle Pineau • Andrew Lim	DUPLICATES	60
	title	Learning Robust Features using Deep Learning for Automatic Seizure Detection	**title**	Learning Robust Features using Deep Learning for Automatic Seizure Detection		
	publication_date	2016-07-31 00:00:00	**publication_date**	2016-07-31 14:28:15+00:00		
	source	SupportedSources.INTERNET_ARCHIVE	**source**	SupportedSources.ARXIV		
	journal		**journal**	None		
	volume		**volume**			
	doi		**doi**			
	urls	• https://web.archive.org/web/20200830030746/https://arxiv.org/pdf/1608.00220v1.pdf	**urls**	• http://arxiv.org/pdf/1608.00220v1 • http://arxiv.org/abs/1608.00220v1 • http://arxiv.org/pdf/1608.00220v1		
	id	id2132044178038579724	**id**	id7577338873742040796		
	abstract	We present and evaluate the capacity of a deep neural network to learn robust features from EEG to automatically detect seizures. This is a challenging problem because seizure manifestations on EEG are extremely variable both inter- and intra-patient. By simultaneously capturing spectral, temporal and spatial information our recurrent convolutional neural network learns a general spatially invariant representation of a seizure. The proposed approach exceeds significantly previous results obtained on cross-patient classifiers both in terms of sensitivity and false positive rate. Furthermore, our model proves to be robust to missing channel and variable electrode montage.	**abstract**	We present and evaluate the capacity of a deep neural network to learn robust features from EEG to automatically detect seizures. This is a challenging problem because seizure manifestations on EEG are extremely variable both inter- and intra-patient. By simultaneously capturing spectral, temporal and spatial information our recurrent convolutional neural network learns a general spatially invariant representation of a seizure. The proposed approach exceeds significantly previous results obtained on cross-patient classifiers both in terms of sensitivity and false positive rate. Furthermore, our model proves to be robust to missing channel and variable electrode montage.		
	versions		**versions**			