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Team ID	PNT2022TMID01033
Project Name	Classification Of Arrhythmia By Using Deep Learning With 2-D ECG Spectral Image Representation
Maximum Mark	

S/No	TITLE	AUTHOR	YEAR	LINK	ABSTRACT
1	Classification on Arrhythmia by using deep learning with 2-D ECG spectral representation	Amin Ullah , Muhammad Anwar, Muhammad Bilal, Raja Majid Mehmood.	2020	https://www.researchgate.net/publication/341623436_Classification_of_Arrhythmia_by_Using_Deep_Learning_with_2-D_ECG_Spectral_Image_Representation	The electrocardiogram (ECG) is one of the most extensively employed signals used in the diagnosis and prediction of cardiovascular diseases (CVDs). The ECG signals can capture the heart's rhythmic irregularities, commonly known as arrhythmias. A careful study of ECG signals is crucial for precise diagnoses of patients' acute and chronic heart conditions using 2-D CNN(Central Nural Network)
2.	Classification of ECG arrhythmias using multiresolution analysis and Neural Networks	G. Krishna Prasad, J.S. Sahambi	2003	https://www.researchgate.net/publication/4059077_Classification_of_ECG_arrhythmias_using_multiresolution_analysis_and_Neural_Networks	A method to accurately classify ECG arrhythmias through a combination of wavelets and artificial neural networks (ANN). The ability of the wavelet transform to decompose signal at various resolutions

				allows accurate extraction/detection of features from non-stationary signals like ECG. A set of discrete wavelet a method to accurately classify ECG arrhythmias through a combination of wavelets and artificial neural networks (ANN). The ability of the wavelet transform to decompose signal at various resolutions allows accurate extraction/detection of features from non-stationary signals like ECG. A set of discrete wavelet	
3	Classification of Arrhythmia from ECG Signals using MATLAB [International Journal of Engineering and Management Research]	Priyanka Mayapur	2019	<p>https://www.researchgate.net/publication/330185548 Classification of Arrhythmia from ECG Signals using MATLAB</p> <p>https://www.researchgate.net/project/ANALYSIS-OF-LEAD-II-ECG-FOR-CLASSIFICATION-AND-DETECTION-OF-HEART-DEFECTS</p>	<p>Automatic classification of ECG has evolved as an emerging tool in medical diagnosis for effective treatments. The work proposed in this paper has been implemented using MATLAB. In this paper, we have proposed an efficient method to classify the ECG into normal and abnormal as well as classify the various abnormalities.</p>
4.	Multiclass Classification of Cardiac Arrhythmia	Anam Mustaqueem, ¹ Syed Muhammad Anwar, ¹ and Mhammad Majid	05 Mar 2018	https://downloads.hindawi.com/journals/cmmm/2018/7310496.pdf	This study is conducted to classify patients into one of the sixteen subclasses, among

	a Using Improved Feature Selection and SVM Invariants				which one class represents absence of disease and the other fifteen classes represent electrocardiogram records of various subtypes of arrhythmias.
5.	Automatic Classification of Cardiac Arrhythmias based on ECG Signals Using Transferred Deep Learning Convolution Neural Network	P. Giriprasad Gaddam ¹ , A Sanjeeva reddy ¹ and R.V. Sreehari	2021	https://iopscience.iop.org/article/10.1088/1742-6596/2089/1/012058/pdf	In the current article, an automatic classification of cardiac arrhythmias is presented using a transfer deep learning approach with the help of electrocardiography (ECG) signal analysis. Now a days, an ECG waveform serves as a powerful tool used for the analysis of cardiac arrhythmias (irregularities). The goal of the present work is to implement an algorithm based on deep learning for classification of different cardiac arrhythmias. Initially, the one dimensional (1-D) ECG signals are transformed to two dimensional (2-D) scalogram images with the help of Continuous Wavelet(CWT).
6.	Computer -Aided Diagnostics of Heart Disease Risk	Ebenezer Owusu, ¹ Prince Boakye-Sekyerehene, ¹ Justice Kwame Appati , ¹ and Julius Yaw Ludu ¹	23 Dec 2021	https://downloads.hindawi.com/journals/cin/2021/3152618.pdf	This study proposes a boosting Support Vector Machine (SVM) technique as the backbone of computer-aided diagnostic tools for

Prediction Using Boosting Support Vector Machine			more accurately forecasting heart disease risk levels. The datasets which contain 13 attributes such as gender, age, blood pressure, and chest pain are taken from the Cleveland clinic. In total, there were 303 records with 6 tuples having missing values.
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