

CLASSIFICATION OF ARRHYTHMIA BY USING DEEP LEARNING WITH 2D ECG SPECTRAL IMAGE REPRESENTATION

LITERATURE SURVEY:

The Purpose of this chapter to review the previous of Researchers on the Airlines Data Analytics for Aviation Industry. This chapter will present the main recent works on the effects of Airline and AirPort services and to avoid delays in Air Travel across different locations at Municipality level.

For time series data, 1-D CNNs are proposed but are less versatile when compared to 2-D CNNs. Hence, representing the time series data in a 2-D format could benefit certain machine learning tasks. The conventional techniques might not achieve efficient results due to the inter-patient variability in ECG signals. The ECG signal detects abnormal conditions and malfunctions by recording the potential bio-electric variation of the human heart. Accurately detecting the clinical condition presented by an ECG signal is a challenging task. A recurrent neural network (RNN) was used for feature extraction and achieved an average accuracy of 98.06% for detecting four types of arrhythmia.

References :

1. *Mc Namara, K.; Alzubaidi, H.; Jackson, J.K. Cardiovascular disease as a leading cause of death: How are pharmacists getting involved? Integr.Pharm. Res. Pract. 2019,1, 1. [CrossRef] [PubMed]*
2. *Lackland, D.T.; Weber, S.M.A. Global burden of cardiovascular disease and stroke: hypertension at the core. Can. J. Cardiol. 2015, 31, 569–571. [CrossRef] [PubMed]*
2. *Anwar, S.M.; Majid, M.; Qayyum, A.; Awais, M.; Alnowami, M.; Khan, M.K. Medical image analysis using convolutional neural networks: A review. J. Med.Syst. 2018,2, 226. [CrossRef]*
3. *Polat, K.; Günes, S. Breast cancer diagnosis using least square support vector machine. Digit.Signal Process. 2007,3, 694–701. [CrossRef]*
4. *Guler, I.; Ubeyli, E.D. ECG beat classifier designed by combined neural network model. Pattern Recognit. 2005 4, 199–208. [CrossRef]*