عنوان مقاله:

Identification of ۵ cardiac arrhythmias with convolutional neural network

محل انتشار:

نهمین کنفرانس بین المللی مهندسی برق ،الکترونیک و شبکه های هوشمند (سال: 1401)

تعداد صفحات اصل مقاله: 10

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خلاصه مقاله:

Heart diseases are one of the most common types of diseases that account for a very high number of deaths. Arrhythmias are abnormal beats that cause a very fast beat (tachycardia) or a very slow beat (bradycardia) and have ineffective pumping. The ability to detect heart symptoms in time, the analysis of the electrocardiogram signal is vital for the diagnosis and treatment of heart patients. This project is to identify, predict and find arrhythmia using neural networks such as CNN. Convolutional neural networks (CNN) are competently compared to other neural networks due to the complexity of the QRS shape for the validation of the test case. The prospective model which is extracted from electrocardiograms (ECGs), highlights as an aid to prepare artificial intelligence computations. Deep learning computations use a predefined coherent architecture to parse information and reach comparative resolutions as individuals. Deep learning It does this with brain organizations that are multimodal projections. It is used to define diseases in the time interval of two consecutive QRS waves. Deep learning uses multilayer algorithms, also called neural networks, to Teach brains to work in patterns similar to the human brain. The prospective approach is used to help doctors diagnose the disease and therefore accelerate it, which is very important for effective treatment. By preprocessing, the integration of data is improved, which leads to better accuracy for the prediction of extraction. Various features help, so it is possible to increase it.

کلمات کلیدی:

Electrocardiogram signal, neural networks, cardiac arrhythmia, QRS signal.

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