

## عنوان مقاله:

Classification of Normal and Murmur Heart Signals by using the CITFA Algorithm and Deep Learning

## محل انتشار:

کنگره بین المللی علوم و مهندسی (سال: 1396)

تعداد صفحات اصل مقاله: 7

## نویسندگان:

Mohammad Hasan Olyaei Torqabeh - Faculty of Electrical Engineering, Sadjad University of Technology, Mashhad, Iran

Hasan Jalali - Faculty of Electrical Engineering, Sadjad University of Technology, Mashhad, Iran

Ali Olyaei Torqabeh - Department of Computer Engineering, Faculty of Engineering, Ferdowsi University of Mashhad, Mashhad, Iran

## خلاصه مقاله:

This paper discusses a new method called CITFA to classify the heart signal into two normal class and murmur class. So far, several methods have been proposed for classifying the heart signal by scientists. This algorithm is based on deep learning and consists of two steps. Firstly, the heart signal is received and then converted to CITFA and used as training data. In the next step, these data are taught to the deep network. The simulation and definition of the deep network is done using Python software. The database used to train the deep network is selected from the Classifying Heart Sounds Challenge series. The simulation results show that the proposed method has a precision of 98.79% of the ability to classify the heart signals.

## کلمات کلیدی:

heart signal, normal, murmur, classification, deep learning, python

## لینک ثابت مقاله در پایگاه سیویلیکا:

<https://civilica.com/doc/755285>

