

## عنوان مقاله:

Automated Spectral Analysis for Pediatric Cardiac Auscultation

## محل انتشار:

بیست و یکمین کنفرانس مهندسی برق ایران (سال: 1392)

تعداد صفحات اصل مقاله: 5

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## خلاصه مقاله:

Early recognition of heart disease is an important goal in pediatrics. Developing countries have a large population of children living with undiagnosed heart murmurs. As a result of an accompanying skills shortage, most of these children will not get the necessary treatment. We designed a system for automatically detecting systolic murmurs due to a variety of conditions. This could enable health care providers in developing countries with tools to screen large amounts of children without the need for expensive equipment or specialist skills. For this purpose an algorithm was designed and tested to detect heart murmurs in digitally recorded signals. A specificity of 100% and a sensitivity of 90.57% were achieved using signal processing techniques and a k-nn as classifier.

## کلمات کلیدی:

Auscultation, cardiac, k-nn classifier, pediatric, wavelet

## لینک ثابت مقاله در پایگاه سیویلیکا:

<https://civilica.com/doc/208383>

