

## Accepted Manuscript

### Improved Binary Dragonfly Optimization Algorithm and Wavelet Packet Based Non-linear Features for Infant Cry Classification

M. Hariharan , R. Sindhu , Vikneswaran Vijejan , Haniza Yazid ,  
Thiyagar Nadarajaw , Kemal Polat , Sazali Yaacob

PII: S0169-2607(17)30766-6  
DOI: [10.1016/j.cmpb.2017.11.021](https://doi.org/10.1016/j.cmpb.2017.11.021)  
Reference: COMM 4552



To appear in: *Computer Methods and Programs in Biomedicine*

Received date: 16 June 2017  
Revised date: 15 November 2017  
Accepted date: 24 November 2017

Please cite this article as: M. Hariharan , R. Sindhu , Vikneswaran Vijejan , Haniza Yazid , Thiyagar Nadarajaw , Kemal Polat , Sazali Yaacob , Improved Binary Dragonfly Optimization Algorithm and Wavelet Packet Based Non-linear Features for Infant Cry Classification, *Computer Methods and Programs in Biomedicine* (2017), doi: [10.1016/j.cmpb.2017.11.021](https://doi.org/10.1016/j.cmpb.2017.11.021)

This is a PDF file of an unedited manuscript that has been accepted for publication. As a service to our customers we are providing this early version of the manuscript. The manuscript will undergo copyediting, typesetting, and review of the resulting proof before it is published in its final form. Please note that during the production process errors may be discovered which could affect the content, and all legal disclaimers that apply to the journal pertain.

## Highlights

- This paper proposes a new feature set using wavelet packet transform based energy and non-linear entropies.
- Improved Binary Dragonfly optimization (IBDFO) based feature selection was proposed to select the most salient features.
- Several two-class and multi-class experiments have been successfully performed by means of this proposed method.
- We report very promising classification accuracies using the selected features by IBDFO for the dataset under test compared to the existing works in the literature.

ACCEPTED MANUSCRIPT

Download English Version:

<https://daneshyari.com/en/article/6891089>

Download Persian Version:

<https://daneshyari.com/article/6891089>

[Daneshyari.com](https://daneshyari.com)