

Accepted Manuscript

The design and validation of a hybrid Digital-Signal-Processing Plug-in for traditional Cochlear Implant Speech Processors

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PII: S0169-2607(17)30658-2
DOI: [10.1016/j.cmpb.2018.03.003](https://doi.org/10.1016/j.cmpb.2018.03.003)
Reference: COMM 4643



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

Received date: 26 May 2017
Revised date: 7 February 2018
Accepted date: 9 March 2018

Please cite this article as: Fatemeh Hajiaghababa , Hamid R. Marateb , Saeed Kermani , The design and validation of a hybrid Digital-Signal-Processing Plug-in for traditional Cochlear Implant Speech Processors, *Computer Methods and Programs in Biomedicine* (2018), doi: [10.1016/j.cmpb.2018.03.003](https://doi.org/10.1016/j.cmpb.2018.03.003)

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Highlights

- We introduced a new Wavelet Neural Network (WNN) audio processing strategy for cochlear implants.
- The clarity of the signal was significantly improved using Particle Swarm Optimization to tune WNN weights.
- The performance of the proposed method was extensively assessed using 9 criteria.
- The proposed algorithm showed major improvements compared with state-of-the art.

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