

Accepted Manuscript

Title: Design of a Novel Biomedical Signal Processing and Analysis Tool for Functional Neuroimaging

Author: Sezgin Kaçar Ünal Sakoğlu

PII: S0169-2607(15)30041-9

DOI: <http://dx.doi.org/doi:10.1016/j.cmpb.2015.11.011>

Reference: COMM 4024

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

Received date: 21-7-2015

Revised date: 8-10-2015

Accepted date: 13-11-2015



Please cite this article as: S. Kaçar, Ü. Sakoğlu, Design of a Novel Biomedical Signal Processing and Analysis Tool for Functional Neuroimaging, *Computer Methods and Programs in Biomedicine* (2015), <http://dx.doi.org/10.1016/j.cmpb.2015.11.011>

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.

Design of a Novel Biomedical Signal Processing and Analysis Tool for Functional Neuroimaging

Sezgin Kaçar*¹ and Ünal Sakoğlu**²

¹Department of Electrical and Electronics Engineering, Technology Faculty, Sakarya University, TURKEY

*e-mail: skacar@sakarya.edu.tr

*Phone: +90 264 295 64 55

*Fax: +90 264 295 64 24

²Department of Computer Science, Texas A&M University - Commerce, Commerce, TX, U.S.A.

**e-mail: unal.sakoglu@tamuc.edu

**Phone: +1 903 886 5242

Highlights

Design of a MATLAB-based GUI tool for general biomedical signal processing and analysis.

EEG and ECG signals can be processed and analyzed by the designed tool.

The easy-to-use and easy-to-learn, intuitive tool provides non-linear chaos analysis.

The tool provides entropy, multivariate analysis with PCA and ICA, pattern classification.

The tool can also be utilized for training in biomedical engineering education.

Download English Version:

<https://daneshyari.com/en/article/6891530>

Download Persian Version:

<https://daneshyari.com/article/6891530>

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