



## Peyvand Ghaderyan

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## Papers in Journals

1. Peyvand Ghaderyan ,& Seyede Marziyeh Ghoreshi Beyrami,Neurodegenerative diseases detection using distance metrics and sparse coding: A new perspective on gait symmetric features,Computers in Biology and Medicine,2020.

2. Peyvand Ghaderyan, Farima Moghaddam, Shiva Khoshnoud, Mousa Shamsi,New interdependence feature of EEG signals as a biomarker of timing deficits evaluated in Attention-Deficit/Hyperactivity Disorder detection,Measurement,2022.

**3**. Aslan Modir , Sina Shamekhi , Peyvand Ghaderyan, A systematic review and methodological analysis of EEG-based biomarkers of Alzheimer's disease, Measurement, 2023.

**4.** Yasamin Ezazi ,& Peyvand Ghaderyan,Textural feature of EEG signals as a new biomarker of reward processing in Parkinson's disease detection,Biocybernetics and Biomedical Engineering,2023.

**5.** Masume Saljuqi ,& Peyvand Ghaderyan,Combining homomorphic filtering and recurrent neural network in gait signal analysis for neurodegenerative diseases detection,Biocybernetics and Biomedical Engineering,2023.

**6**. Rezvan Mirzaeian ,& Peyvand Ghaderyan,Gray-level co-occurrence matrix of Smooth Pseudo Wigner-Ville distribution for cognitive workload estimation,Biocybernetics and Biomedical Engineering,2023.

7. Elham Dehghanpur Deharab ,& Peyvand Ghaderyan,Graphical representation and variability quantification of handwriting signals: New tools for Parkinson's disease detection,Biocybernetics and Biomedical Engineering,2022.

8. Masume Saljuqi ,& Peyvand Ghaderyan,A novel method based on matching pursuit decomposition of gait signals for Parkinson's disease, Amyotrophic lateral sclerosis and Huntington's disease detection,Neuroscience Letters,2021.

**9.** Peyvand Ghaderyan ,& Ataollah Abbasi,Sparse coding classification and cepstral singular value for cognitive workload estimation,Computers and Electrical Engineering,2021.

**10.** Peyvand Ghaderyan ,& Gisoo Fathi,Inter-limb time-varying singular value: A new gait feature for Parkinson's disease detection and stage classification,Measurement,2021.

11. Seyede Marziyeh Ghoreshi Beyrami ,& Peyvand Ghaderyan,A robust, cost-effective and non-invasive computer-aided method for diagnosis three types of neurodegenerative diseases with gait signal analysis,Measurement,2020.

**12**. Peyvand Ghaderyan ,& Ataollah Abbasi,A novel cepstral-based technique for automatic cognitive load estimation,Biomedical Signal Processing and Control,2018.

13. Peyvand Ghaderyan , Ataollah Abbasi , Afshin Ebrahimi, Time-varying singular value decomposition analysis of electrodermal activity: A novel method of cognitive load estimation, Measurement, 2018.
14. Peyvand Ghaderyan , Ataollah Abbasi , Sajad Saber, A new algorithm for kinematic analysis of

handwriting data; towards a reliable handwriting-based tool for early detection of alzheimer's disease,Expert systems with applications,2018.

**15**. Peyvand Ghaderyan ,& Ataollah Abbasi,Dynamic Hilbert warping, a new measure of RR-interval signals evaluated in the cognitive load estimation,Medical Engineering and Physics,2017.

**16**. Peyvand Ghaderyan ,& Ataollah Abbasi,An efficient automatic workload estimation method based on electrodermal activity using pattern classifier combinations,International Journal of Psychophysiology,2016.

**17**. Peyvand Ghaderyan , Ataollah Abbasi , Mohammad Hossein Sedaaghi,An efficient seizure prediction method using KNN-based undersampling and linear frequency measures,Journal of Neuroscience Methods,2014.

## Thesis

1. neurodegenerative diseases detection using inter-limb deviations of gait signals

**2.** The impact of handwriting tasks for the computer-aided diagnosis of Alzheimer's disease and Parkinson's disease

**3**. The analysis of the relationships between brain areas during a time perception tasks for the diagnosis of Attention Deficit Hyperactivity

**4.** Parkinson's disease detection using gait pattern recognition and decomposition of vertical ground reaction force signals.

5. Time-frequency gait analysis for the detection of Neurodegenerative diseases

6. An investigation of electroencephalogram similarity feature during a flanker task for the diagnosis of obsessive compulsive disorder

7. parkinson's disease detection using electroencephalogram analysis in a reinforcement-learning task8. Subjective, performance, and psychophysiological data acquisition and analysis for cognitive workload detection using deep learning

9. Cognitive workload estimation using psychophysiological feature fusion technique

**10**. An ECG-based obstructive sleep apnea detection using the combination of time-frequency decomposition techniques