Brain Informatics

Special Issue on
Brain-inspired Wearable Computing with Machine Learning for Healthcare

Guest Editors

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Brain-inspired Wearable Computing is a new frontier in brain-computer interface systems. There is a lack of easily understood data about how an individual brain works and processes information. Brain-inspired things seek to simplify a person’s understanding of his/her own brain and the brains of others. It does this through continuous monitoring of brain activity as well as enabling some interactivity by using (non) invasive technologies at various spatiotemporal scales and their possible integration. Furthermore, machine learning techniques are utilized to analyse the collected data from wearable sensor devices and other sources to identify potential patterns and clinical conditions of the patient.

The main focus of this special issue is on the recent advances and applications of brain-inspired wearable computing with machine learning for healthcare. The topics may include but are not limited to the following list:

- Artificial intelligence enabled wearable computing for monitoring the affective state and the disease progression
- Brain-inspired wearable computing in robotics and its applications in deep brain stimulation (DBS) and intracranial electrophysiology technologies
- Brain-inspired wearable computing in fatigue state detection and recognition for health and safety
- Deep Learning and neural networks for cognitive and affective state recognition
- Designing, implementing, and deploying novel protocol and architecture in wearable computing
- Individual centric design for health intervention, modeling and evaluation
- Integration of multiple sensing and data fusion technologies in wearable computing for healthcare
- Machine learning for healthy and abnormal brain big data mining
- Wearable computing architecture for data flow from body sensors to the cloud
**Important Dates**

Paper Submission deadline: Jan 30, 2021  
First round notification: March 30, 2021  
Final decision notification: May 30, 2021

**Submission Instructions**

For submission instructions please visit the journal website at  
https://braininformatics.springeropen.com/  
or contact M. Sundhararajan at sundararajan.ece@bharathuniv.ac.in