BioMed Research International

Special Issue on Neural Computation for Rehabilitation

Call for Papers

With the rapid growth of ageing population, rehabilitation for neurological disorders, for example, stroke, Alzheimer's, and Parkinson's diseases, is one of the grand challenges faced for the coming years. Knowledge and new technologies are needed for effective rehabilitation with the attempt to release the increasing demands for long-term medical treatments and healthcare, as well as to help the patients regain or maintain independency in their daily living. Successful rehabilitation depends on the understanding of the pathological mechanisms, effective methods in the treatment, and accurate evaluation on the recovery progress. Advances in neural computation provide solutions to brain modeling, quantitative neural information processing, and neural imaging. The related new findings also inspire new techniques for diagnosis, rehabilitation treatments, and development of novel training devices.

We invite authors to submit original research and review articles that explore mechanisms and/or technologies of neural computation applied in rehabilitation. Potential topics include, but are not limited to:

- Computational neuroscience and its clinical applications
- Learning paradigms and algorithms in rehabilitation systems
- Brain machine interfaces
- Robotic systems for rehabilitation
- Data mining and information processing for neural data
- Quantitative evaluations on rehabilitation effectiveness
- Neural imaging for rehabilitation

Before submission authors should carefully read over the journal's Author Guidelines, which are located at http://www.hindawi.com/journals/bmri/guidelines/. Prospective authors should submit an electronic copy of their complete manuscript through the journal Manuscript Tracking System at http://mts.hindawi.com/submit/journals/bmri/rehabilitation/ncr/ according to the following timetable:

Manuscript Due	Friday, 28 March 2014
First Round of Reviews	Friday, 20 June 2014
Publication Date	Friday, 15 August 2014

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