Computational Intelligence and Neuroscience

Special Issue on

Practices and Theories for Deep Learning in Healthcare

CALL FOR PAPERS

In view of increasing appalling and alarming diseases in humans, much focus is on medical related research and investigation nowadays. Until this time, for disease specific features different diagnostic computer programs were coded keeping in view the sequence of predefined assumption. Those such customized programs need to be designed and developed for each body part in order to identify diseases, but their flexibility and scalability are not properly measurable and hence never reached widespread clinical adoption due to oversimplified reality and poor diagnostic performance. On the other hand, deep learning is eagerly available to incorporate a broad gamut of diseases in the whole body covering all image modalities like MRI scans, CT scans, X-rays, and pathological tests.

Thus, the purpose of this special issue is healthcare adoption in association with artificial intelligence methods and machine learning algorithms especially deep learning to mimic its theories and practices. The aim focuses to put forward a constructive research platform to scientists, researchers, teachers, and students to share their valuable contribution of how healthcare knowledge is generated, shared, organized, and practically applied using deep learning algorithms to transform it into computational healthcare practices.

In recent days, deep learning or deep neural networks are already a solution of many computer vision applications like machine vision, audio and speech recognition, robotic vision, natural language processing, neurosciences, text recognition, natural language processing, image recognition and classification, video analytics, and many other fields. Therefore the said research journal essentially aims to involve deep learning role to resolve healthcare issues due to its representational and recognition supremacy which assist healthcare personals to determine, predict, analyze, and practice its theories for the delivery of healthcare. Further, deep learning algorithms are suitable to shape new/existing information and communication processes and model methods and principles for diversified practices and their impact on the individuals.

Deep learning algorithms are significantly playing important role in IOT analytics. Such deep learning algorithms help to mitigate risks encounter during the behavior of healthcare devices while capturing all scenarios of data preprocessing stage and continuous monitoring of sensory data at the same time. Deep neural network can absorb any kind of data depending on the addressing issues like text, time series, sounds, videos, and images. In response, it solves almost any problem of machine perception including predictions, classifying data, and recognition in images for further utilization in various applications like helping the visually impaired, detection of dreadful diseases, healthcare facilitation, and many more.

The scope of such publications facilitates worldwide improving and initiating policies in order to overcome health related issues. Articles engrossing deep learning may be submitted in this journal in original papers.

Potential topics include but are not limited to the following:

- Neural networks for behavioral health research, services and practices
- Neurocomputing approaches for Biotechnology healthcare
- Neural network models for Global change health and promotion
- Deep learning in Healthcare expectations, informatics and management
- Deep learning in Healthcare policy, planning and practice development
- Neural networks for Healthcare technology assessment, computation and quality
- Deep Neural networks for Public health dentistry, ethics and nursing
- Online deep learning applications for Value health in urban and rural areas
- Online deep learning for Pediatric health care
- Innovative studies and research in Healthcare
- Deep learning for Clinical informatics
- Deep Neural networks for Translational bioinformatics
- Deep Neural networks in Patient management and recruitment
- Efficient data analysis, transfer, storage and processing in Healthcare
- Neural networks for Gynecological and obstetric Healthcare
- Neural networks for Health and rehabilitation resort treatment
- Faster and accurate computer aided diagnosis of Healthcare medical imaging
- Healthcare suggestions and treatment queries
- Neural networks for Collection of crowd sourced medical data for proper scaling in Healthcare
- Discovery of medical drug in Healthcare
- Deep Neural networks for Autonomous and guided Robotic surgery in Healthcare
- Genomics for personalized medication in Health care
- Deep Neural networks for Autonomous recommendations and treatments in Healthcare
- Integration with Healthcare big data towards precision imaging
- Deep Neural networks to Overcome of limitations in Radiology applications

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Submission Deadline
Friday, 12 October 2018

Publication Date
March 2019