J-BHI Special Issue on "Data-driven Cognitive Computing for Smart Healthcare Systems"

Recently, data-driven cognitive computing as a technology-based solution has attracted a lot of attention from both researchers and practitioners. This approach uses multiple intelligent technologies such as machine learning, deep learning, artificial intelligence, natural language processing, and image recognition to understand data comprehensively. It has been proven to be effective in a wide spectrum of fields, such as affective computing, social computing, graph-based machine learning, and so on. The biggest advantage of cognitive computing is its ability to "understand" unstructured data, including emotion, language, images, and video. Thus, it can be directed at improving efficiency in constructing smart healthcare systems. To this end, exploring advanced data-driven cognitive computing technologies have great potential and capacity to enable new methodology, applications, and dramatic improvements for achieving an elegant breakthrough in terms of seamless interoperability, low cost, high speed, low latency, and increased efficiency for smart healthcare construction.

This special issue aims to solicit high-quality original research papers, which address the cutting-edge theories, models, and applications for smart healthcare systems, supported by advanced data-driven cognitive computing technologies.

Topics of interest include, but are not limited to, the following:

- Data-driven cognitive computing methods and theory
- Data-driven cognitive-inspired smart healthcare systems
- Data-driven cognitive for medical signal processing
- Data-driven cognitive-enabled IoMT for smart healthcare systems
- Machine learning and data mining for smart healthcare systems
- Data-driven cognitive for intelligent medical communications and sensing
- AI-assisted cognitive computing approaches for smart healthcare systems
- Affective learning for decision support systems for smart healthcare systems
- Integration of cognitive computing and AI for smart healthcare systems
- New machine learning algorithms for data-driven smart healthcare systems
- Cognitive computing for analyzing nonlinear dynamics for smart healthcare systems
- Cognitive computing solutions for trust, security, and privacy in smart healthcare systems
- Application of new and novel cognitive computing methods in smart healthcare systems

Guest Editors

Prof. Syed Hassan Ahmed, sh.ahmed@ieee.org
California State University, Fullerton, USA

Prof. Wei Wei, wwei@uow.edu.au
University of Wollongong, Australia

Prof. Wei Wang, ehomewang@ieee.org
Sun Yat-sen University, China

Key Dates

Deadline for Submission: 15 June, 2023
First Reviews Due: 15 August, 2023
Revised Manuscript Due: 15 September, 2023
Final Decision: 15 December, 2023