Tentative Outline

Special Thematic Issue for Combinatorial Chemistry & High Throughupt Screening

Data, Bio and medical informatics, and Artificial Intelligent Technologies and Their Applications in Bio and Medical Real World

Guest Editor: Keun Ho Ryu (temporary, Nipon Theera-Umpon, Meijing Li)

Aims & Scope:

The goal of this Special Issue is to explore how interdisciplinary technology solutions of data, bio and medical informatics and artificial intelligence in disease, cancer, healthcare, and hospital can help to human beings leading healthy lives. Specifically, innovative contributions that either solve or advance the understanding of issues related to interdisciplinary technologies and applications as well as practical and experiences in the real world are very welcome. This Special Issue seeks not only solutions that combine state-of-the-art data and bio and medical informatics, artificial intelligence, but also research and practical articles from lots of public and commercial databases which have been set up to store this information and provide services, such as GeneBank, GEO, TCGA, KEGG, DrugBank, and so on. Many of them have been updated several times as time goes on and novel information is added. For a specific biomedicine and bio pharmacy problem, investigators have lots of choices to select useful information, which is greatly different from the case about ten years ago. However, information in different databases, even in the same database, may have different structures and organization forms. How to fuse information with different structures and organization forms into a uniform format, thereby feeding into the downstream investigation, is a great challenge. Thus, this special issue which focuses on dealing with research and practical approach problems in disease, cancer, healthcare, and hospital, has been proposed.

Potential topics are as follows. Fundamental approaches for exploiting the health and bio data, software tool resources available ensuring that these systems are explainable to domain experts and new methods that more generally describe the successful applications of interdisciplinary technologies to issues such as disease, cancer, knowledge discovery, databases, software design development in the medical domain as well as healthcare and biology domains.

Keywords: Biomedical informatics, Artificial intelligent technology, Machine learning.

Subtopics:

The subtopics to be covered within this issue are listed below:

This Special Issue welcomes the submission of technical, experimental, methodological, data analytical and design contributions focused on real-world problems, general applications of data, bio and medical informatics, artificial intelligence methodologies in interdisciplinary technology solutions and real-world applications in disease, cancer, healthcare, and hospital, including but not limited to the following topics:

- Digital signal processing and image processing technology;
- Decision support systems for medical or biomedical signals;
- Healthcare and wellness information systems;
- Applications of AI techniques in healthcare and wellbeing systems;
- Intelligent computing and platforms in medicine and healthcare;
- Big data frameworks and architectures for applied bio, medical, and health data;
- Visualization and interactive interfaces related to data, AI, disease, healthcare, hospital systems;
- Machine learning and deep learning applications for biomedical data;
- Querying and filtering on heterogeneous, multi-source streaming life and health data;
- Interdisciplinary technologies and applications for biomedical informatics

Schedule:

- Manuscript submission deadline: Dec. 31, 2020
- Peer Review Due: Feb. 15, 2021
- Revision Due: Mar. 01, 2021
- Announcement of acceptance by the Guest Editors: Mar. 30, 2021
- Final manuscripts due: April 15, 2021

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