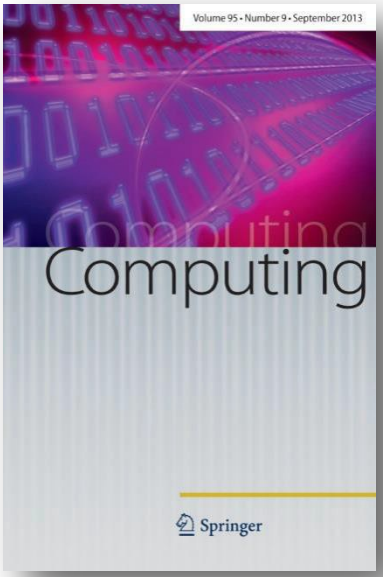

Computing
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Call for Papers

Special Issue on

Multi-objective Optimization and Data Analysis in Informationization

Guest Editors

A/Prof. Kelvin Wong (Corresponding Guest Editor), University of Adelaide, Australia
A/Prof. Zhihua Liu, Department of Biostatistics, Harvard School of Public Health, USA
A/Prof. Quan Zou, Tianjin University, China.

We invite authors to submit articles on the applications of operational research, big data technology and theory of computation in knowledge discovery, data integration and intelligent decision of management, as well as the advance in the information industry.

In the information technology age, informationization is the inevitable development trend of the industries pertaining to medical, social, manufacturing, education, agriculture, or engineering fields. From the individual information query to the allocation of thousands of resources and staff, all the information operations involved is a part of the process of informationization. In the past few decades, the computing hardware and software has continued to grow exponentially. Furthermore, breakthrough in operational research and arrival of the era of big data has helped us to find a better solution for human information needs. However, there still are some challenging problems for providing a better service. For most given problems, multi-objective optimization and data mining can provide the optimal solution. And machine learning such as artificial neural network, deep learning, evolutionary algorithm, and genetic algorithm are some of the other well-established techniques we can explore for solutions generation. In the typical industry, using these algorithms can help organizations find the potential factors which affect their customers more accurately and improve service provision. It can also identify trends that bridge the gaps among fragments of seemingly unrelated information. In addition, the process of informationtization also promotes the development of informatics, including membrane computing, gene expressions, genetic computing, etc. These new technologies can offer much higher quality and personalized service for people.

This special issue focuses on the applications for problems in the medical domain, covering the solution for special problems or finding the potential correlation between diseases and some factors that seem unrelated. The main goal of this special issue is to provide the overview of the current state-of-the-art advances in the process of informationization.

Topics of the Special Issue

The topics of interest include, but are not limited to:

- Data system analysis and information management.
- Mobile applications to provide online consultants including diagnosis, planning, and follow-ups, etc.
- Computer methods in machine diagnostics.
- Big data techniques towards health domain such as collection, analysis, learning, processing of widely used medical data through wearable devices.
- Health informatics and modeling of biological systems.
- Management of biomedical data to assist with clinical decision-making and therapy guidance.
- Big data analysis of agricultural products for food quality assurance.

Tentative Schedule

Submission due date:	October 30th, 2018
Notification of acceptance:	January 30th, 2019
Submission of final manuscript:	February 30th, 2019

Major Guidelines

The special issue invites original research papers that make significant contributions to the state-of-the-art in SE for/in BDA research area. We seek submission of papers that present new, original and innovative ideas for the "first" time in Computing Journal. That means, submission of "extended versions" of already published works (e.g., conference/workshop papers) is not encouraged unless they contain significant number of "new and original" ideas/contributions along with more than 50% brand "new" material. If you are submitting an extended version, you SHOULD submit a cover letter/document detailing (1) the "Summary of Differences" between Computing Journal paper and earlier paper, (2) a clear listing of "new and original" ideas/contributions in Computing Journal paper (identifying sections where they are proposed/presented), and (3) confirming the percentage of new material. Otherwise, submission will be "desk" rejected without any reviews.

Every submitted paper will receive at least two reviews. The editorial review committee will include well known experts in the area of Multiobjective Optimization and Big Data Analytics.

Selection and Evaluation Criteria

- Significance to the readership of the journal
- Relevance to the special issue
- Originality of idea, technical contribution, and significance of the presented results
- Quality, clarity, and readability of the written text
- Quality of references and related work
- Quality of research hypothesis, assertions, and conclusion

Submission Guidelines

Papers should be formatted according to the *Computing* journal instructions for authors at: http://www.springer.com/607. Springer has LaTeX templates: see "Instructions for Authors / Text" at http://www.springer.com/607. No templates for Word. Either LaTeX OR Word is accepted.

Manuscript length

Please note, the special issues page limit is different from *Computing* regular paper submissions. Papers that exceed the length of 12 pages may not be considered for review and publication. In special cases up to 15 pages will be allowed subject to approval from the Guest Editors. Authors aiming for 15 page submission should contact the Guest Editors in advance.

Submission instruction

The article will be submitted in the usual way via the online submission site at (http://www.springer.com/607).

When submitting a manuscript for this special issue, authors should take care to select 'Special Issue Multi-objective Optimization and Data Analysis in Informationization' as the Manuscript Type.