Recent years have witnessed a dramatic increase in applied computing for solving real-world problems due to the significant improvement and advancements in information technologies. A variety of applications – such as artificial intelligence systems, robotics, sensors technology, communication networks and the Internet of Things (IoTs) – have been helping the industry to solve a number of real-world problems. There is a large number of applications that have proved their practical potential within several domains and their popularity is rising. For most of the scientists and engineers introducing applied computing into practice, looking at the growing number of new approaches and understanding their theoretical principles and potential for value creation is becoming an increasingly difficult task.

The main aim of this special issue is to present state-of-art solutions to provide a robust system with the ability to operate in dynamic and changing environments, including methods for industry and real-world problems. Papers addressing either a theoretical or practical perspective are very welcome, as well as contributions presenting relevant applications. We also welcome papers addressing other challenges related to applying computing to support industry for innovation and technology such as artificial intelligence, machine learning, big data, and networks and systems.

The Guest Editors will be inviting substantially extended versions of selected papers presented at First International Conference on Applied Computing to Support Industry: Innovation and Technology (ACRIT 2019) for review and potential publication, but are also inviting other experts to submit articles for this call.

Subject Coverage

Suitable topics include, but are not limited, to the following:

- Artificial intelligence and data science
- Machine learning
- Data structures and algorithms
- Decision support system
- Extraction of biometric features (fingerprint, face, gait)
- Time series modelling
- Evolutionary ensemble systems
- Evolutionary optimisation, machine vision, pattern recognition
- Information theory
- Game theory
- Machine learning and deep learning methods in healthcare
- Data mining and bioinformatics
- Multi-dimensional big data
- Real-world problem solving using swarm intelligence
- Internet of Things
- Next-generation wireless/wireline communications
- Cryptography and information security
- Communication networking
- Parallel and distributed computing
- Social network applications
- Mobile computing
- Ad hoc and sensor networks
- Internet and web applications
- Mobile application and security
- Network protocols and wireless networks
- Wireless multimedia systems
- Surveillance systems
- Agile systems design
- Virtual reality and its application
- Manufacturing systems
- Robot control
- Software engineering
- Computer animation
- Multimedia systems and services
- Integrating technology in education
Notes for Prospective Authors
Submitted papers should not have been previously published nor be currently under consideration for publication elsewhere. (N.B. Conference papers may only be submitted if the paper has been completely re-written and if appropriate written permissions have been obtained from any copyright holders of the original paper).

All papers are refereed through a peer review process.

All papers must be submitted online. To submit a paper, please read our Submitting articles page.

Important Dates
Manuscripts due by: 15 December, 2019
Notification to authors: 15 February, 2020
Final versions due by: 1 April, 2020