

Special Session on: Computational Intelligence Algorithms and Applications

Computational Intelligence (CI) is the theory, design, application and development of biologically and linguistically motivated computational paradigms. Traditionally the three main pillars of CI have been Neural Networks, Fuzzy Systems and Evolutionary Computation. However, in time many nature inspired computing paradigms have evolved. Thus CI is an evolving field and at present in addition to the three main constituents, it encompasses computing paradigms like ambient intelligence, artificial life, cultural learning, artificial endocrine networks, social reasoning, and artificial hormone networks. CI plays a major role in developing successful intelligent systems, including games and cognitive developmental systems. Over the last few years there has been an explosion of research on Deep Learning, in particular deep convolutional neural networks. Nowadays, deep learning has become the core method for artificial intelligence. In fact, some of the most successful AI systems are based on CI. This special session mainly focuses on the application areas of computational intelligence (CI). The key application areas, where AI is making a significant impact, but lack a coherent publication venue. These include: Business Intelligence, i.e. data mining to support business decision makers; Social Network mining, e.g. modelling aggregate properties and dynamics of social networks, classifying vertices and edges of social networks, identifying clusters of users; Critical Infrastructure Protection, e.g. intrusion/anomaly detection & response, learning knowledge bases of system administration, log file mining); Entertainment and Game Development, i.e. building game engines using AI techniques; Software Engineering, including program understanding, software repositories and reverse engineering; Business, Finance, Commerce and Economics: learning aggregate behaviours (e.g. stock market trends) or modeling individual and group demographics (e.g. web mining); and Knowledge-based and Personalized User Interfaces, to make interaction clearer to the user and more efficient, with better support for the users' goals, and efficient presentation of complex information.

The topics of this session include the following but not limited to:

- CI in Data Processing for Social Networks
- CI for Social media analytics
- CI for Sentiment Analysis and Recommender Systems
- CI in Agriculture and Sustainable management
- CI in healthcare and Bioinformatics
- CI in networks, communications, and intelligent systems
- New techniques for data monitoring and processing
- Designing sensors and Biosensors for diagnosis
- Intelligent algorithms for smart cities
- Application oriented state-of-art review/ survey studies on computational intelligence
- Blockchain and applications using CI

Publication:

All the accepted papers are published by Springer and selected extended papers of the conference will be invited to submit for publication in the special issue of various SCIE/Scopus Indexed Journals. The complete list of journals associated with conference is found at:

<http://dosci-conf.com/publication>

SUBMISSION PROCEDURE:

Researchers and practitioners are invited to submit papers for this special theme session on **“Computational Intelligence Algorithms and Applications”** on or before 30th December 2022. All submissions must be original and may not be under review by another publication. INTERESTED AUTHORS SHOULD CONSULT THE CONFERENCE’S GUIDELINES FOR MANUSCRIPT SUBMISSIONS at http://dosci-conf.com/paper_submission.html. All submitted papers will be reviewed on a double-blind, peer review basis.

Session committee member’s details

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NOTE: While submitting paper in this special session, please specify **“Computational Intelligence Algorithms and Applications”** at the top (above paper title) of the first page of your paper.

Important: All the authors who are submitting papers in our special issue are requested to send the mail about their submission, with paper Title, on my mail id:
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