Indian Institute of Technology Indore









SocProS 2020

About the Theme

The term 'Soft Computing' encompasses a set of computational techniques in Al and machine learning, computer science and other engineering disciplines. It investigates, simulates and analyzes highly complex problems and phenomena in real life. SocProS aims to,

- Bring the research fraternity together in the field of Soft Computing, Computational Intelligence and AI.
- Investigate the future prospective directives with employing recent advances.
- Encourage practitioners/researchers to enhance their ability for problem-solving in optimisation.

About SocProS

SocProS is a flagship series of International Conferences and is the signature event of Soft Computing Research Society (SCRS, India). It aims to bring together the world's leading scientists, researchers, engineers and practitioners to present the latest achievements and innovations in the interdisciplinary areas of soft computing and to discuss thought-provoking developments and challenges, in order to inform potential future directions. The major objective of the conference is to encourage the participation of young researchers working on themes related to soft computing in particular and Artificial Intelligence in general. The series of this conference started in 2011 and successfully continued in the following institutes:

2019 - Liverpool Hope University, UK

2018 - VIT Vellore, Vellore, India **2017** - IIT Bhubaneswar, India

2016 - Thapar University, Patiala, India

2015 - IIT Roorkee (Saharanpur

Campus), India

2014 - NIT Silchar, India

2013 - IIT Roorkee (Greater Noida

Extension Centre, Delhi), India

2012 - JKLU, Jaipur, India

2011 - IE(I), RLC, Roorkee, India





Call for Papers

Authors are invited to submit their original, unpublished and quality research papers (full-length manuscripts) in the areas including but not limited to:

- Algorithms: Deep learning, including Convolutional Neural Networks, Generative Adversarial Networks and Autoencoders. Other machine learning, including Artificial Immune Systems, Artificial Neural Networks, Neuro-Fuzzy Systems, Reinforcement Learning, Incremental Learning, Bayesian networks, Support Vector Machines, Hybrid Learning, Statistical learning. Metaheuristics, including Genetic Algorithms, Genetic Programming, Particle Swarm Optimisation, Spider Monkey Optimisation, Harmonic Search, Differential Evolution, Bacterial Foraging Optimisation, Fruit Fly Optimisation, Firefly Algorithm, Drosophila Food search Optimisation, Memetic Algorithms, Robotic Simulated Annealing, Stochastic Diffusion Search, Tabu Search, Fuzzy logic, Inductive Logic Programming. Data Scientific topics, including Membrane Computing and p-Systems, Aggregation Operators, Applied Mathematical approaches to solve intractable problems, Long short term memory, Recurrent neural network and other Artificial Intelligence algorithms,
- Applications: Internet of Everything(IoT), Control Systems, Data-mining and Clustering, Finance, Weather Forecasting, Game Theory, Grid Computing, Image Processing, Scheduling and Timetabling, Signal Processing, Supply Chain Management, Web and Text Mining, Wireless Sensor Networking, Smart Cities, Medicine, Health, Bioinformatics and Systems Biology, Economics, Business, Wind and Solar Energy, other Intelligent Systems and Forecasting Applications. Soft Computing Applications in Optimization.

Manuscripts can be submitted via EasyChair online submission system:

https://easychair.org/conferences/?conf=socpros2020

Acceptance of a paper implies the willingness of at least one of the authors to register and present the paper. After the conference, the authors of outstanding papers will be invited to submit their works for journal publication. The selected papers, after the peer review process, will be published in a special issue of well-indexed journals.

For more information about SocProS 2020, including details on important dates, registration, conference venue, keynote and invited speakers, and sponsors please visit: http://www.socpros20.scrs.in or drop an email to the Conference Chair at socpros20@iiti.ac.in.





Conference Proceedings

The Conference Proceedings will be published online in the SCOPUS indexed AISC series by Springer. Extended versions of selected papers will be invited for peer-review and inclusion in well-indexed journals.

Additionally, an extended version of a selection of papers will also be considered (following a peer-review) for inclusion in an edited volume published by the book series 'Algorithms for Intelligent Systems' (Springer).

Important Dates

• Last date of Paper Submission: July 30, 2020

• Notification of acceptance: August 30, 2020

• Camera-ready submission of accepted papers: September 15, 2020

Special Session Proposal: July 20, 2020

• Tutorial Proposal: July 30, 2020

Registration of accepted papers: September 15, 2020

• Conference Date: December 18 - 20, 2020







About Indian Institute of Technology Indore:

Indian Institute of Technology Indore (IIT Indore) located in Simrol, Khandwa Road, Madhya Pradesh, is one of the eight new Indian Institutes of Technology (IIT) established by the Ministry of Human Resource Development (MHRD), Government of India in 2009. IIT Indore has positioned itself as a vibrant centre for outstanding research. IIT Indore has been promoting multi-disciplinary research programme, focusing on basic and applied research, technology development and innovation. IIT Indore was established with the aim of providing quality higher education on par with international standards. It persistently seeks and adopts innovative methods to improve the quality of higher education on a consistent basis. Experienced and learned teachers are strongly encouraged to nurture the students. The larger commitment of the institute to socio-economic development is evident in its multi-dimensional approach to social problems and is engraved in its motto ('knowledge for the well-being of all'), which makes this institution one of its kind and it stands out even within the distinguished IIT family.

More details regarding IIT Indore can be found on the Institute's website: http://iiti.ac.in/

Contact

For more details visit: www.socpros20.scrs.in

Mail your queries at: socpros20@iiti.ac.in



