

International Joint Conference on Advances in Computational Intelligence (IJCACI) 2020

Department of Computer Science and Engineering

Daffodil International University, Dhaka, Bangladesh









Organizing Committee

- **Chief Patron:** ٠ Md Sabur Khan, Chairman, BoT, DIU
- Patron: M. Lutfar Rahman, VC, DIU Farzana Islam, Honourable VC, JU R K Mohanty, Honourable President, SAU S.M. Mahbub UI Haque Majumder, Pro-VC, DIU •
- **General Chair:** Syed Akhter Hossain, DIU Mohammad Shorif Uddin, JU Jagdish Chand Bansal, SAU
- General Co-Chair: ÷ Touhid Bhuiyan, DIU Kapil Sharma, SAU
- **General Secretary:** ÷ Narayan Ranjan Chaktaborty, DIU ÷ Joint Secretary:
- Sheak Rashed Haider Noori, DIU Md Zahid Hasan, DIU Saiful Islam, DIÚ
- **Organizing Secretary:** Ahmed Al Marouf, DIU
- **Registration and Reception:** • Shah Md Tanvir Siddique, DIU Rubaiya Hafiz, DIU
- **Finance Committee:** *
- Mominul Haque Mazumder, DIU Food and Accommodation Committee: •
- Abdus Sattar, DIU Raja Tarikul Hasan Tushar, DIU
- ÷ **Transportation Committee:** Nazim Uddin Sarker, DIU
- Venue Preparation Committee: ÷ Sazzadur Ahmed, DIU Dewan Mamun Raia, DIU
- **Publicity & Communication Committee:** ٠ Anowar Habib Kazal, DIU President, DIU CPC President, DIU GCPC
- **Proceedings & Souvenir Committee:** • Fizar Ahmed, DIU Nadir Bin Ali, DIU Sheikh Abujar, DIU Jueal Mia, DIU
- Website Committee: Nazmun Nessa Moon,DIU Iftieag Murshed, DIU
- ÷ Industry Links Committee: S. M. Aminul Haque, DIU Md. Tanvir Rahman, DIU Masud Rabbani, DIU Zerin Nasrin Tumpa, DIU

Technical Program Committee

- Program Chair: ٠. Mohammad Shorif Uddin, JU Program Co-Chair: M. Shamim Kaiser, JU
- Sheak Rashed Haider Noori, DIU Kapil Sharma, SAU Mufti Mahmud, NTU

Contact:

IJCACI 2020 Secretariat: Dept. of Computer Science and Engineering Daffodil International University, Dhaka, Bangladesh Tel: +880 9116774, 9136694 E-mail: ijcaci2020@diu.edu.bd Web: ijcaci2020.daffodilvarsity.edu.bd

Welcome to the International Joint Conference on Advances in Computational Intelligence (IJCACI 2020) organized by Daffodil International University (DIU), Jahangirnagar University (JU), Bangladesh and South Asian University (SAU), India. This conference will be held virtually on 20-21 November 2020 at Daffodil International University (DIU).

Accepted and presented papers of Conference Proceedings will be published in Springer book series: Algorithms for Intelligent Systems.

This conference (named as IWCI 2016) for the first time successfully held on 12-13 December 2016 at Jahangirnagar University (JU), Bangladesh in collaboration with South Asian University (SAU), India under the technical co-sponsorship of IEEE Bangladesh Section. After consecutive two years, named as IJCCI, it held at Daffodil International University in 2018 and at University of Liberal Arts Bangladesh (ULAB) in 2019. This year it is renamed as International Joint Conference on Advances in Computational Intelligence (IJCACI 2020).

IJCACI 2020 invites submissions of substantial, original, and previously unpublished research works on neural networks, evolutionary algorithms, fuzzy systems, machine learning and optimization. The Conference is focused to discuss the state-of-the-art developments, research challenges and unsolved open problems in the field of Computational Intelligence to beginners as well as to professionals. It will also provide a platform for students, scientists and faculty members to involve, interact, present and get reflections on their research. The official language of the Conference is English.

Authors are invited to submit papers describing original, previously unpublished work, not currently under review by another conference, workshop, or a journal.

Topics of interest include, but are not limited to:

- Neural Networks •
- ÷ Evolutionary Algorithms
- ÷ Genetic Algorithms
- ÷ Swarm Intelligence
- ÷ Fuzzy Logic
- ÷ Knowledge-Based Expert System
- Intelligent Agents and Robotics ÷
- \$ Intelligent Systems and Control
- ÷ **Optimization Algorithms**
- Web Intelligence ÷
- ÷ Machine Learning
- Information and Network Security •

Publication

- **Bioinformatics and Biomedical Systems** ٠ ÷ Cognition
 - ÷ Game Theory
 - ÷ Natural Language Processing
 - ÷ Data Mining and Visualization
 - Computational Methods for Mathematical Problems *
 - ÷ Industrial Automation
 - ÷ Pattern Recognition and Computer Vision
 - ÷ Speech, Image and Video Processing

Springer

- ÷ Intelligent Software
- ÷ Cloud Computing & IoT
- ÷ Mobile Computing

- To submit a paper, please check the Conference website: ijcaci2020.daffodilvarsity.edu.bd

Accepted and presented papers of Conference Proceedings will be published in Springer book series: Algorithms for Intelligent System. Each paper must have at least one author registered. Submit paper at: https://easychair.org/conferences/?conf=ijcaci2020

Presentation

All the presentations of this conference will be virtually held and e-certificates will be provided.

Important Dates

Full Paper Submission - 31 July 2020 Notification of Acceptance - 10 September 2020 Camera-Ready Paper - 30 September 2020 Registration Deadline – 15 October 2020 Date of Conference - 20-21 November 2020

Advisory Committee

Navnit Jha, South Asian University, India Pankaj Jain, South Asian University, India Saroj Sahani, South Asian University, India Danish Lohani, South Asian University, India Sunil Kumar Khatri, Director, AIIT, Amity University, India Abdullah Gani, University of Malaya, Malaysia Alamgir Hossain, Anglia Ruskin University, UK Asik Paul, University of Calcuta, India AHM Zahirul Alam, IIUM, Malaysia B. S. Chowdhury, MUET, Pakistan Curtis R. Menyuk, University of Maryland, USA Haris Haralambous, Frederick University, Cyprus J Kamruzzaman, Federation University, Australia K. Dahal, University of West Scotland, UK M Mahbubur Rashid, IIUM, Malaysia Mahmud, Nottingham Trend University, Uk M Nasir Uddin, Lakehead University, Canada Poompat Saengudomlert, BU-CROCCS, Thailand Ramjee Prasad, Aalborg University, Denmark Emeritus Ranjan Gangopadhyay, LNM IIIT, India Xavier Fernando, Ryerson Comm. Lab, Canada Jamal El-Den, Charles Darwin University, Australia

Registration

International Presenter/Participant: US\$ 100 Local Presenter/Participant: BDT 3000 Student Presenter/Participant: BDT 2000

> Sheikh Md. Monzurul Huq, Treasurer, JU A. K. M. Fazlul Hoque, DIU Abdul Goffar Khan, RUET Ajit Kumar Mazumdar, Dean, JU Asadul Huq, DU Sheikh Anowarul Fattah, BUET Celia Shahnaz, *BUET* Mohammad Shamsul Arefin, *CUET* Mohammad Zahidur Rahman, JU Mohammed Moshiul Hoque, CUET Hamidul Haque Khan, DIU Md Kabirul Islam, DIU Md. Abdur Razzaque, DU Md. Nurul Alam, Pro-VC, JU Md. Nuru Alam, 176-yc, 30 Md. Amir Hussain , Pro-VC, JU Md. Atiqur R. Ahad, DU Md. Golam Mowla Choudhury, DIU Md. Milan Khan, DIU Md. Mohiuddin Ahmad, KUET Md. Nasim Akhtar, DUET Md. Nurunnabi Mollah, KUET Mohammad Hanif Ali, JU S.M. Mahbub Ul Haque Majumder, DIU Shamsul Alam, DIU Syed Mizanur Rahman, DIU