

## SCOPE

The state-of-the-art image processing research works are dedicated to cover a wide range of computational intelligence techniques with a completely new way of neural networks organization concept called Capsule Networks [CapsNets] that opens up a new era of advanced image-processing applications. It is being organized on May 6-7, 2020 in association with King Mongkut's University of Technology Thonburi, Thailand, Dayeh University, Taiwan, Tribhuvan University, Nepal, and RVS Technical Campus, India. Moreover, this International Conference on Image Processing and Capsule Networks [ICIPCN 2020] initiates a capsule network perspective to leverage an authoritative and detailed representation to deliver an enhanced image and video recognition and adaptive processing mechanisms which were closely related to the humanistic way of thinking. This extended ICIPCN 2020 conference will be a dedicated platform for researchers, academicians and scholars to share and exchange their valuable research insights, which may clearly define the image and the family of image processing techniques and applications. Henceforth, this premier International conference motivates the researchers to discover more information from images and perform innovative image analysis procedures by efficiently utilizing the evolving capsule network models.

## COMMITTEE MEMBERS

### CONFERENCE CHAIR

#### **Dr. Joy Iong Zong Chen**

Professor, Department of Electrical Engineering  
Da-Yeh University  
Taiwan.

### TECHNICAL PROGRAM CHAIRS

**Dr. Joy Iong Zong Chen**, Professor, Department of Electrical Engineering, Da-Yeh University, Taiwan.

**Dr. Joao Manuel R. S. Tavares**, Universidade do Porto, Portugal.

**Dr. Abdul M. Elias**, Tokyo Institute of Technology, Tokyo-Japan.

**Dr. Subarna Shakya**, Professor, Institute of Engineering, Pulchowk, Tribhuvan University, Nepal.

**Dr. Wang Haoxiang**, Go Perception Laboratory, Cornell University, USA.

**Dr. Tanes Tanitteerapan**, Dean Faculty of Industrial Education and Technology, King Mongkut's University of Technology Thonburi, Thailand.

**Dr. S. Smys**, Professor, Department of CSE, RVS Technical Campus, Coimbatore, India.

### PUBLICATION CHAIRS

**Dr. Robert Bestak**, Czech Technical University in Prague, Czech Republic.

**Dr. A. Khaled A Kamel**, Texas Southern University, USA.

### LOCAL ORGANIZING COMMITTEE

**Dr. Tanes Tanitteerapan**, Dean Faculty of Industrial Education and Technology, King Mongkut's University of Technology Thonburi, Thailand.

**Dr. Pisith Hengjinda**, Faculty of Engineering and Industrial Technology, Phetchaburi Rajabhat University, Thailand.

### TECHNICAL PROGRAM COMMITTEE

**Dr. KyungHi Chang**, INHA University, Korea.

**Dr. Michel Plaisent**, University of Quebec, Montreal, Canada.

**Dr. D. Nirmal**, Karunya University, India.

**Mr. Reijo Savola**, VTT Research Centre, Finland.

**Dr. Tugrul Yanik**, Celal Bayar University, Turkey.

**Chung Yi-Nan**, Dep. Electrical Eng. National Chung-Hao Normal University Taiwan

**Dr. Youssouf EL ALLIOUI**, Laboratoire des Sciences des, Hassan 1th University, Morocco.

**Dr. S. Jennifer**, Gnanamani College of Technology, India.

**Dr. Yi-Nan Chung**, Dep. of Electrical Engineering, National Changhua University of Education, Taiwan.

**Dr. Shaoyi Cheng**, EECS, University of California, Berkeley, United States

**Dr. Ivan Kotuliak**, Slovak University of Technology in Bratislava, Slovakia.

**Dr. Vasile Avram**, Bucharest University, Romania.

**Dr. Mazlan Abbas**, REDtone IOT Sdn Bhd, Malaysia.

**Dr. KyungHi Chang**, INHA University, Korea.

**Mr. C. Sudhir**, HP, Bangalore, India.

**Dr. Vinoth Kanna**, Guru Nanak Institute of Technology, Hyderabad, India.

**Dr. Michel Plaisent**, University of Quebec in montreal, Canada.

**Dr. Venkata Ramana Mudinepalli**, National Taiwan Normal University, Taiwan.

**Dr. B.Chitti Babu**, The University of Nottingham (U.K) Malaysia Campus, Malaysia.

**Dr. BH. Sekar**, Mangalore University, India.

**Dr. Tsai Huan-Liang**, Dep. Material Eng. Da-Yeh University Taiwan

**Dr. Lee Hong-Ben**, Dep. Material Eng. Da-Yeh University Taiwan

**Dr. Shuai Li**, The University of Cambridge, Great Britain

**Dr. Sanjay Sharma**, Thapar University, India.

**Dr. S. Saravanakumar**, Mahindra Research Valley, India.

**Dr. K.Elangovan**, Country Head, NAFEMS India Operations.

**Dr. Joby**, St. Joseph's College of Engineering and Technology, Kerala, India.

**Dr. Shweta D**, Sr Data Scientist, P & G, Ohio., USA.

**Dr. Abhijit Ghosh**, Lincoln University College, Malaysia.

**Dr. Divya**, Lincoln University College, Malaysia.

**Prof. Dr. Ali M. Eltamaly**, King Saud University, Saudi Arabia.

**Dr. Sunny Joseph Kalayathankal**, K. E. College, Mannanam, Kottayam, India.

**Dr. Shyam Akashe**, ITM University, Gwalior, India.

**Dr. Venkata Ramana Mudinepalli**, National Taiwan Normal University, Taiwan.

**Dr. Hui Ming Wee**, Distinguished Professor and Associate Dean and Chaplain, Chung Yuan Christian University.

**Dr. Afreen**, Lincoln University College, Malaysia.

**Dr. Aung**, Lincoln University College, Malaysia.

## CALL FOR TOPICS

ICIPCN 2020 welcomes the prospective authors to submit their research works that covers the different aspects of image processing and analysis techniques. All the research papers should state their research novelty and state-of-the-art contributions towards image processing architectures and applications.

### IMAGE PROCESSING

Image recognition and Analysis  
Image Registration  
Image segmentation and edge detection  
Image texture analysis  
Medical imaging systems  
Image acquisition, reconstruction and synthesis  
Feature Extraction techniques  
Medical image diagnosis  
Image reconstructions and losses  
Medical interpretability and explainable deep learning frameworks  
Image processing for multispectral images  
Image enhancement and restoration  
Image formation principles  
Pattern recognition and capsule networks in object tracking  
Face and gesture recognition techniques  
Cognitive vision of image processing

### CAPSULE NETWORKS

Capsules in image analysis  
Deep learning in image analysis  
Pattern recognition  
Machine Learning  
Data mining  
Big data analytics and imaging  
Visual content analysis  
Capsule based Fuzzy systems  
Human-visual systems  
Robotic vision of image processing  
Capsules in adaptive image processing  
Machine learning in capsule neural networks

Capsule implementation in image systems  
Capsules and digital image processing techniques  
Machine vision-based capsule networks  
Industrialized capsule networks  
Artificial intelligence in capsule networks

## SUBMISSION

### FORMAT

All papers must be formatted according to the Springer AISC template, with a maximum length of 15 pages including figures and references in Microsoft Word Format 2007, Microsoft Word Format 2003, Latex Format.

All proposed papers must be submitted in electronic form (DOC/DOCX format) using the ICIPN submission management system or through Email [[icipcn.conf@gmail.com](mailto:icipcn.conf@gmail.com)].

### REGISTRATION

Author: 200 USD\*

Listener: 150 USD

\*Maximum number of pages per paper: 15

## PUBLICATION

All accepted & registered papers will be included in ICIPCN 2020 Proceedings, published by

**Springer - Advances in Intelligent Systems and Computing Series**

Series Ed.: Kacprzyk, Janusz

ISSN: 2194-5357

Link: <https://www.springer.com/series/11156>

## VENUE

**Ibis Bangkok Riverside Hotel**

Banglamphulang, Klongsarn,  
10600,  
Bangkok [Thailand].

## CONTACT

**Dr. Joy Iong Zong Chen**

Conference Chair: ICIPCN 2020

Contact: +91 9790628946 / +91 6382925489

Email: [icipcn.conf@gmail.com](mailto:icipcn.conf@gmail.com)

**Conference Website:** <http://icipcn.com/#>

# INTERNATIONAL CONFERENCE ON IMAGE PROCESSING AND CAPSULE NETWORKS

(ICIPCN-2020)

May 6-7, 2020



### Organized by

Mongkut's University of Technology  
Thonburi, Thailand,  
Dayeh University, Taiwan,  
Tribhuvan University, Nepal  
RVS Technical Campus, India

