

### Chief Patron

**Dr. P. Shyama Raju**

Hon'ble Chancellor, REVA University

**Mr. Umesh S. Raju**

Pro Chancellor, REVA University

### Patrons

**Dr. M. Dhanamjaya**

Vice Chancellor, REVA University

**Dr. Rajashekhar C Biradar**

Pro Vice Chancellor, REVA University

**Dr. N. Ramesh**

Registrar, REVA University

### General Chair

**Dr. Mallikarjun M Kodabagi**

Professor & Director, School of Computing and Information Technology  
REVA University

**Dr. P. Shivakumara**

Department of Computer System and Technology,  
Faculty of Computer Science and Information Technology,  
University of Malaya (UM), Kuala Lumpur-50603, Malaysia

### Organising Chairs

**Dr. Vishwanath R Hulipalled**

Professor & Dy. Director R&I, REVA University

**Dr. G. Parthasarathy**

Associate Professor, SCIT, REVA University

**Dr. Muthu Kumar B.**

Professor, SCIT, REVA University

### Technical Program Chairs

**Dr. Geetha D.**, Professor, SCIT, REVA University

**Dr. Muthu Kumar B.**, Professor, SCIT, REVA University

**Dr. Udaya Rani V.**, Sr. Assoc. Professor, SCIT, REVA University

**Dr. Sarvamangala D R.**, Sr. Asst. Prof., SCIT, REVA University

**Prof. Manikandan M.**, Asst. Prof., SCIT, REVA University

**Prof. Nandini S.**, Asst. Prof., SCIT, REVA University

**Prof. Pratap M.S.**, Asst. Prof., SCIT, REVA University

**Prof. Aarth G.**, Asst. Prof., SCIT, REVA University

### Publication Chairs

**Dr. Parthasarathy G.**, Assoc. Professor, SCIT, REVA University

**Dr. N. Thillaiarasu.**, Assoc. Professor, SCIT, REVA University

**Prof. Syed Thouheed Ahmed.**, Asst. Prof., SCIT, REVA University

**Dr. Sandhya G.**, Professor, SCIT, REVA University

**Dr. Sindhu P Menon.**, Professor, SCIT, REVA University

**Prof. Manjunath Varchagall.**, Asst. Prof., SCIT, REVA University

**Prof. Kavitha .D.**, Asst. Prof., SCIT, REVA University

**Prof. Balaraju G.**, Asst. Prof., SCIT, REVA University

### Website Chairs

**Dr. G. Arulkumar.**, Assoc. Professor, SCIT, REVA University

**Prof. Pavankumar Naik.**, Asst. Prof., SCIT, REVA University

**Prof. Vijayalaxmi C H.**, Asst. Prof., SCIT, REVA University

### Organising Committee

**Dr. Joseph Michael Jerard.**, Professor, SCIT, REVA University

**Dr. Chatrapathy.**, Professor, SCIT, REVA University

**Dr. Sandhya G.**, Professor, SCIT, REVA University

**Dr. Sindhu P Menon.**, Professor, SCIT, REVA University

**Dr. Geetha C Mara.**, Assoc. Professor, SCIT, REVA University

**Dr. Lithin K.**, Asst. Prof., SCIT, REVA University

**Prof. Rashmi C.**, Asst. Prof., SCIT, REVA University

**Prof. Anitha K.**, Asst. Prof., SCIT, REVA University

**Prof. Sowmya Sundari L K.**, Asst. Prof., SCIT, REVA University

**Prof. Raghavendra Nayaka P.**, Asst. Prof., SCIT, REVA University

**Prof. Surendra Babu K N.**, Asst. Prof., SCIT, REVA University

**Prof. Aruna Kumara B.**, Asst. Prof., SCIT, REVA University

**Prof. Pavithra S.**, Asst. Prof., SCIT, REVA University

**Prof. Syed Thouheed Ahmed.**, Asst. Prof., SCIT, REVA University

**Prof. Bhavana N.**, Asst. Prof., SCIT, REVA University

**Prof. Ravatappa A Bhosagi.**, Asst. Prof., SCIT, REVA University

**Prof. Kasiviswanath N J.**, Asst. Prof., SCIT, REVA University

### International Advisory Committee

**Dr. Bryan Gardiner.**, Ulster University, UK

**Dr. Ir. Emir Mauludi Husni.**, Institut Teknologi Bandung, Indonesia

**Dr. Heru Suhartanto.**, University of Indonesia, Indonesia

**Dr. Ahmed E Elngar.**, Beni-Suef University, Egypt

**Dr. Qin Xin.**, University of the Faroe Islands, Denmark

**Dr. Pascal Lorentz.**, University of Haute Alsace, France

**Dr. Rajkumar Buyya.**, University of Melbourne, Australia

### National Advisory Committee

**Dr. Nagabushan.**, IIIT Allahabad, India

**Dr. Shahidhar G Koolagudi.**, NITK, Surathkal

**Dr. Hemantha Kumar.**, Vice Chancellor, University of Mysore

**Dr. S A Angadi.**, Visveswaraya Technological University

**Dr. Santhosh K Sahu.**, IIT-Indore

**Dr. M N Birje.**, Visveswaraya Technological University

**Dr. Vivek Venkobara.**, Vitesco Technologies, Bangalore India



# REVA UNIVERSITY

Bengaluru, India

## Second International Conference on Computing, Communication and Cyber Physical Systems IC3CPS 2023

20<sup>th</sup> - 21<sup>st</sup> October 2023



Organised by

### School of Computing and Information Technology

REVA University in association with  
University of Malaya (UM)



<https://www1.reva.edu.in/ic3cps2021/>

Rukmini Knowledge Park,  
Kattigenahalli, Yelahanka, Bengaluru-560064  
Phone: +91-80-4696 6966

Rukmini Educational  
Charitable Trust

[www.reva.edu.in](http://www.reva.edu.in)

## About REVA University

REVA University is a State Private University established in Karnataka State under the Government of Karnataka Act No. 13 in the year 2013 in Bengaluru, the IT capital of India. The University is recognised by the University Grants Commission (UGC) and is approved by the AICTE (All India Council for Technical Education).

REVA University prides itself in contributing to every student's holistic development. The University currently offers 39 full-time Under Graduate Programmes, 32 full-time Post Graduate programmes, 18 PhD programmes, and certification and diploma programmes. The University offers programmes in Engineering, Architecture, Science and Technology, Commerce, Management Studies, Law, Arts & Humanities, and Performing Arts. Courses are offered in Certificate/Diploma and Post Graduate Diploma too. REVA University facilitates research leading to a Doctoral Degree in all disciplines. The programmes offered by REVA University are well-planned and designed based on methodical analysis and research with emphasis on knowledge assimilation, practical applications, hands-on training, global and industrial relevance, and their social significance.

Teachers and instructors with illustrious academic experience are the architects of the meticulously designed curriculum and program modules offered at REVA University. They come with industrial exposure and experience that often translates through their teaching, thus bridging the gap between the industry and academia.

REVA University has an updated, ever-evolving collection of books, journals, and digital content in the library with the latest IT infrastructure that ensures students have information at their disposal. The lush green campus, state-of-the-art laboratories, custom-designed classrooms to enable seamless learning, and world-class indoor and outdoor sports facilities make REVA University the most preferred university among students and MNCs that visit the campus for placements.

## About the School

The School has a rich blend of experienced and committed faculty who are well-qualified in various aspects of computing and information technology apart from the numerous state-of-the-art digital classrooms and laboratories having modern computing equipment. The School offers five full-time undergraduate programs, B Tech in Computer Science and Engineering, B Tech in Computer Science and Engineering (Artificial Intelligence and Machine Learning), B Tech in Computer Science and Information Technology, B Tech in Computer Science and Systems Engineering, B Tech in Information Science and Engineering and three postgraduate programs: M Tech in Data Engineering and Cloud Computing & M.Tech in Cyber Security. In addition, the school has a unique academic collaboration with the University of Alabama in Huntsville to jointly offer an

MS program in Computer Science. In addition, the school has a research center in which students can conduct cutting edge research leading to a PhD degree. Curricula of both undergraduate and postgraduate programs have been designed through a collaboration of academic and industry experts in order to bridge the growing gap between industry and academia. This makes the program highly practical-oriented, and thus industry-resilient.

## About the Conference

ICC3PS is jointly organized by University of Malaya (UM), Kuala Lumpur, Malaysia and School of Computing and Information Technology, REVA University, Bangalore, India, to be held from 20th and 21st October 2023. The focus of the conference is to provide a unique platform for exchange of ideas and synergy among researchers, academicians, industrial experts and entrepreneurs across the globe in a gamut of divergent engineering and technology disciplines. State of the art innovations in computing, communication and Cyber physical technologies including latest research trends and developments in emerging areas all the accepted and registered papers will be recommended to SCOPUS indexed Journals for publication.

## Call For Papers

### Track – 1: Computing Technologies

- Cloud and Grid Computing
- Machine & Deep Learning, Neural Networking
- High Performance Computing
- Data Mining and Internet of Thing
- Bioinformatics and Bio-Inspired Computing
- Artificial Intelligence and Computer Vision
- Information Retrieval and Embedded Technology
- Software Engineering & Process Management

### Track – 2: Communication

- Network Security and Communication System
- Storage Area Network (SAN) & Optimizations
- Mobile Computing & Optical Networks
- Computer Networks and Data Communication
- Distributed Network Systems
- Wireless Sensor and Communication Networks

### Track – 3: Cyber Physical Systems

- Cyber Physical Systems Data Mining and Analytics
- Machine Learning for Cyber Physical Systems

- Deep Learning for Cyber Physical Systems
- Computer Vision Systems in Cyber Physical Systems
- Decision Systems in Cyber Physical Systems
- Multimedia Systems in Cyber Physical Systems
- Natural Language Processing for Cyber Physical Systems

## Important Dates

Date for Manuscript Submission Due: 30<sup>th</sup> September 2022

Date of Acceptance: 6<sup>th</sup> October 2022

Date of Early Bird Registration: 11<sup>th</sup> October 2022

Date of Late Registration: 15<sup>th</sup> October 2022

## Paper Submission Link

Online paper submission link:

<https://bit.ly/3RP1j44> (Google Forms)

## Publication

All the accepted and registered papers will be recommended to SCI/ SCOPUS /UGC indexed Journals for publication on Additional Charges. (For more details, refer Website)

- Malaysian Journal of Computer Science (SCI)
- International Journal of Information Technology Management (Scopus)
- International Journal of Human Computation and Intelligence (UGC)
- Artificial Intelligence and Applications (AIA), BonView Press, Singapore

## Registration Fee

Indian Author (Student / Researcher)	2000 INR
Indian Author (Academic / Faculty)	2500 INR
Indian Author (Industry)	3000 INR
Foreign Author (Student / Researcher)	150 USD
Foreign Author (Academic / Faculty)	175 USD
Foreign Author (Industry)	200 USD

## Contact

### Dr. N. Thillaiarasu

Assoc. Professor, SCIT, REVA University  
(M: +91 9677582756)

### Mr. Manikandan M,

Asst. Prof., SCIT, REVA University  
(M: +91 9944145449)