

# INTERNATIONAL CONFERENCE ON ARTIFICIAL INTELLIGENCE FOR SUSTAINABLE APPLICATIONS

*A Spectrum of Opportunities*



**VIRTUAL MODE**

**ICAISA - 2021**

**DECEMBER 16 - 18, 2021**

**ORGANIZED BY  
DEPARTMENT OF INFORMATION TECHNOLOGY  
PSG COLLEGE OF TECHNOLOGY, COIMBATORE**



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## ABOUT THE COLLEGE

PSG College of Technology, an ISO 9001:2000 certified institution is one of the foremost institutions founded by the PSG & Sons' Charities Trust (1926). The College was established in the year 1951 and the Founders wisely decided to locate it in the same campus as the PSG Industrial Institute for effective industry-institute interaction. The founder Principal Dr. G R Damodaran was instrumental in the planned growth of the institution from the humble beginnings in 1951 to the present status of a world-renowned technological institution. The College today has a student strength of about 8518 with 15 engineering and technology departments. More than 600 research scholars are pursuing research programmes leading to Ph.D. / MS / M Tech degrees and the college is a recognized QIP centre for Postgraduate and Ph.D. programmes. Several advanced centres are set up with financial support from the Ministry of Human Resources Development, DST and other agencies. The programmes of the college are recognized all over India and abroad.



## ABOUT THE DEPARTMENT

The Department of Information Technology was established in the year 1999 with a vision to develop quality engineers to meet the current needs in the emerging world of IT. The department endeavours to educate students to acquire technical expertise and knowledge in the field of Information Technology. The department offers an undergraduate programme B.Tech IT and two post graduate programmes M.Tech IT and M.E. Biometrics and Cyber Security. The Department is Anna University recognized research centre with more than 25 Scholars pursuing research. Funded research projects sponsored by AICTE, DST - CSRI and UGC are under progress in the area of security, analytics, etc. The department has signed MoU with Samsung PRISM and Boston Creative Company for innovative projects.



# THEME OF THE CONFERENCE

The advent of recent technologies and demand for Information and Communication Technology (ICT) based applications such as Artificial Intelligence, Machine Learning, IoT, Health Care, Data Analytics, Augmented Reality / Virtual Reality, Cyber Physical Systems, Future Generation Networks have gained more priority and have become much more essential component in the modern time. In the recent times, Artificial Intelligence (AI) plays a significant role in everyday activities of life. AI not only creates opportunities however conjointly brings greater challenges to the sustainable development of engineering applications. Therefore, the association between Artificial Intelligence and sustainable applications is essential. Moreover, applications of sustainable products have come a long way in the past few decades, driven by social & environmental awareness and abundant modernization in the pertinent field.

New research efforts are inevitable in designing sustainable applications and communication between them becomes a promising field to explore. The motivation behind this conference is to provide a common forum for researchers, practitioners to present and discuss their latest research ideas and developments. The outcome of the conference will focus on how the Artificial Intelligence is useful in achieving the sustainable solutions through sharing innovative ideas using interdisciplinary research.

## CONFERENCE TRACKS

We invite papers addressing the use of Artificial Intelligence for Sustainable Development, but not limited to:



### Track 1: AI for Computer Vision

- Image and Signal Processing
- Audio and Speech Processing
- Computer Graphics and Multimedia
- Digital Twin
- Sensor Technology
- Bioinformatics



### Track 2: AI for Data Analytics

- Data Mining Statistical Analysis
- Natural Language Processing
- Cloud and Distributed Computing
- Machine Learning
- Cognitive Computing
- Quantum Computing



### Track 3: AI for Communications and Networks

- Wireless Communications and Networks
- Stochastic Processes and Queueing Theory
- Game Theory
- 5G Networks
- Edge and Fog Computing
- HPC and Parallel Computing



### Track 4: AI for IoT

- Embedded Systems
- Service Oriented Architecture (SOA)
- Industry 4.0
- Smart Grid
- Smart Healthcare Devices
- Sustainable Development and Smart Surveillance



### Track 5: AI for Security

- Cyber Security
- Network Security
- Threat Intelligence
- Blockchain Technology
- Malware Analysis
- Cyber Forensics



## KEYNOTE SPEAKERS



**Dr. Zhou Liang**

Research Centre for Medicine  
Intelligent and Development  
Shanghai Jiao Tong University  
China

**Dr. Vijayan K. Asari**

Department of Electrical and  
Computer Engineering  
University of Dayton  
USA



**Dr. Millie Pant**

Department of Applied  
Science and Engineering  
Indian Institute of Technology  
Roorkee  
India



**Dr. Diego Oliva**

Department of Computer  
Sciences  
Universidad de Guadalajara  
Mexico



**Dr. Barath Narayanan**

Department of Electrical and  
Computer Engineering  
University of Dayton  
Research Institute  
USA



**Dr. A. Srinivasan**

Department of Robotics  
and Automation  
CSIR-Central Mechanical  
Engineering Research Institute  
Durgapur  
India



## REGISTRATION FEE

INDIAN DELEGATES			FOREIGN DELEGATES	
Registration category	Academia		Industry	Faculty Members / Industry / Research Scholar
	Faculty Members	Full Time Research Scholar / PG Students		
Preconference Workshop Only	1000 INR	750 INR	1500 INR	50 USD
Conference Only	5000 INR	4500 INR	6000 INR	100 USD
Preconference workshop & Conference	5500 INR	5000 INR	7000 INR	125 USD
Listener	1250 INR		40 USD	

• Inclusive of all taxes

For paper submission and registration, kindly refer this link [www.psgtech.edu/ICAISA21](http://www.psgtech.edu/ICAISA21)

## SPONSORSHIP OPPORTUNITIES

Industries / Startups / Product Companies / Dealers / Suppliers / Retailers are requested to grab the following sponsorship opportunities:

Platinum sponsor	50,000 INR
Gold sponsor	30,000 INR
Silver sponsor	20,000 INR
Bronze sponsor	10,000 INR

## SOUVENIR ADVERTISEMENT OPPORTUNITIES

Category	Foreign Sponsors	Indian Sponsors
Full page color	150 USD	4000 INR
Half page color	75 USD	2000 INR

## PUBLICATIONS

- Conference proceedings will be published by Renowned Publishers
- The extended version of the conference paper will be recommended to the following journals:



Journal of The Institution of Engineers (India): Series B [Scopus indexed journal]

<https://www.springer.com/journal/40031>



Iran Journal of Computer

<https://www.springer.com/journal/42044>



Design Analytics Journal

<https://www.journals.elsevier.com/decision-analytics-journal>





## SCHEDULE

- 16.12.2021 : Pre-Conference Workshop
- Samsung PRISM, Bangalore
- 17.12.2021 : International Conference – Day 1
- Keynote Addresses
  - Panel Discussion
  - Paper Presentations (Oral / Poster)
- 18.12.2021 : International Conference – Day 2
- Keynote Addresses
  - Paper Presentations (Oral / Poster)



## IMPORTANT DATES

Submission Deadline: September 15, 2021  
Acceptance Notification: October 15, 2021  
Conference Dates: December 16 – 18, 2021



## MODE OF PAYMENT

Payment of registration fee can be made through this link  
[www.psgtech.edu/ICAISA21](http://www.psgtech.edu/ICAISA21)



## ORGANIZING COMMITTEE

### CHIEF PATRON

**Shri. L. Gopalakrishnan**  
Managing Trustee

### PATRON

**Dr. K. Prakasan**  
Principal In-Charge

### CONVENER

**Dr. K. Umamaheswari**  
Professor & Head

### ORGANIZING SECRETARIES

**Dr. B. Vinoth Kumar**, Associate Professor  
**Dr. V. Ilayaraja**, Assistant Professor (Sel. Gr.)  
**Dr. S. K. Somasundaram**, Assistant Professor (Sel. Gr.)  
**Dr. P. Sivakumar**, Assistant Professor (Sr. Gr.)



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