

Second International Conference on  
*Networks & Soft Computing*

(ICNSoC - 2025)

12<sup>th</sup> - 14<sup>th</sup> June 2025



Organized by



**VIGNAN'S**  
FOUNDATION FOR SCIENCE, TECHNOLOGY & RESEARCH

(Deemed to be University) - Estd. u/s 3 of UGC Act 1956



PUBLISHED BY  
IEEE COMPUTER SOCIETY  
**CONFERENCE  
PUBLISHING  
SERVICES**

# Second International Conference on *Networks & Soft Computing*

(ICNSoC 2025)

12 – 14 June, 2025

Organised by

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING  
*Vignan's Foundation for Science, Technology & Research, Guntur.*

*Our Prestigious Rankings and Accreditations*



**65**

Among the best  
universities in  
India by NIRF

**72**

Among the best  
Engineering Colleges  
in India by NIRF

**12**

Exclusive Institute  
in India by ABET

**2**

Among the best  
universities in A.P.

## **About The Event**

*The Second International Conference on Networks and Soft Computing (ICNSoC 2025) aims to bring together scholars working in this field to exchange their expertise and experience. Topics of current interest will be presented at this conference in order to provide a comprehensive view of the latest advancements in computer science and engineering. The scope includes Networks, Wireless and Ad-hoc sensor networks, soft computing, machine learning, computer vision, image processing, natural language processing, deep learning, artificial intelligence, artificial neural networks, mobile application development, and Internet of Things, among other topics. Conference participants are expected to gain relevant knowledge and a better understanding of computer science applications in various fields.*

## ICNSoC Committee



**Chief Patron**  
Dr. L. Rathaiah  
Chairman & Chancellor  
VFSTR



**Chief Patron**  
Sri L. Srikrishnadevarayalu  
Vice-Chairman  
Member of Parliament



**Patron**  
Col. Prof. P. Nagabhushan  
Vice-Chancellor  
VFSTR



**Patron**  
Ex. Comd. Dr. M.S. Raghunathan  
Registrar  
VFSTR



**Honorary Chair**  
Prof. Xiao-zhi Gao  
Professor, University of Eastern  
Finland



**Conference Chair**  
Prof. K.V. Krishna Kishore  
Dean, School of Computing  
and Informatics



**Publication Chair**  
Dr. S. V. Phani Kumar  
Professor and HOD, CSE



**Finance Chair**  
Dr. S. Deva Kumar  
Associate Professor, CSE

PUBLISHED BY  
IEEE COMPUTER SOCIETY  
**CONFERENCE  
PUBLISHING  
SERVICES**



## About Vignan Group

VIGNAN GROUP is a premier group of institutions in the country, which has established a strong foothold at all levels of education by catering to the needs of various sections of student community. Starting from schools to junior colleges(+2), Science, Engineering, Pharmacy and Postgraduate institutions with a student base of about 60,000. VIGNAN has today branched across all important geographical areas of A.P, like Guntur, Vizag and Hyderabad.

### Vignan's Network

- 1 University
- 1 University Off Campus
- 6 Engg. Colleges
- 3 Pharmacy Colleges
- 1 Institute of Law
- 1 B.Ed College
- 1 UG & PG College
- 7 Junior Colleges
- 18 Schools

## Organizing Co-Chair

Dr. Satish Kumar Satti

## TPC Chairs

Dr. Suganya Devi K  
NIT Silchar

Dr. Naresh Babu M  
IIITDM Kurnool

Dr. K Venkata Krishna Rao,  
NIT Warangal

Dr. S Sankar Ganesh  
JNTU Hyderabad

Dr. B. Nagaraju  
NIT, Nagaland

## TPC-Co Chairs

Dr. D. Yakubu

Dr. Umadevi M

Dr. Sunil Babu M

Dr. Vinoj j

## Publicity Committee

Dr. Balu Narasimha Rao

Dr. R Renuga Devi

Dr. O Bhaskar

Dr. Soubhagya Ranjan Biswal

Dr. Prashant Upadhyay

Dr. Md Oqail Ahmad

## Organizing Committee

Dr. P. Siva Prasad

Dr. Jhansi Lakshmi P

Mrs. B. Suvarna

Mrs. G. Parimala

Mrs. G. Navya

Mr. R. Pratap Kumar

Mr. O. Gandhi

Dr. N. Sameera

Dr. E. Deepak Chowdary

Dr. T.R. Rajesh

Dr. V.S.R. Pavan Kumar Neeli

Dr. Manoj Kumar Merugumal

Dr. Rambabu Kusuma

Mr. Uttej Kumar N

Mr. Sourav Mondal

Mr. Sheik Bhadar Saheb

Mrs. SD. Shareefunnisa

Mr. K. Pavan Kumar

Mr. Kiran Kumar Kaveti

Mrs. V. Anusha

Mrs. Ch. Pushya

MS. Sk. Sajida Sultana

Mr. Sk. Sikindar

Mr. S. Jayasankar

Mr. Sheik Bhadar Saheb

Mr. Simhadiri Chinna Gopi

Ms. K. Anusha

Mr. D. Balakotaiah

Mr. S. Suresh Babu

Mr. P. Kiran Kumar Raja

Mr. T. Narasimha Rao

Mr. Raveendra Reddy

Mrs. Magham Sumalatha

Mr. P. Venkata Rajulu

Mrs. Sai Spandana Verella

Mr. Jani Shaik

Mrs. V. Nandini

Mrs. Archana Nalluri

Mrs. K. Jyostna

Mr. B. Ravi Teja

Mrs. R. Lalitha

Mr. G. Veera Bhadra Chary

Mr. N. Brahma Naidu

Mr. Kumar Devapogu

Mrs. Koganti Swathi

Mr. U. Venkateswara Rao

Mr. Gajjula Murali

Mrs. P. Mounika

Mr. Ch. Amaresh

Mr. K. Kiran Kumar

Mr. Y. Ram Mohan

Mr. B. Anil Babu

Mrs. S. Anitha

Mrs. D. Tipura

Mrs. Tanigundala Leelavathy

Mrs. Ch. Swarna Lalitha

## Website Committee

Mr Ch Ravi Kishore

Mr P Vijaya Babu

Mrs M Bhargavi

## **Objective**

*ICNSoC-25 will provide a platform for Researchers, Academicians & Industrials to share their research. This conference will also have prominent Keynote Speakers in the themes of Networks & Soft Computing.*

## **Prominence**

*It will serve the future needs of the researchers and it is a nice opportunity to explore new dimensions about their research.*

## **Tracks of ICNSoC 25**

*Researches exploring Analysis, Design, Specification, Implementation, Verification, Measurement, and security related to Networks.*

## **CALL FOR PAPERS**

### **Track 1 : Next-Generation Networks and High-Performance Computing**

- o 6G and Beyond: Challenges, Architectures, and Use Cases*
- o Software-Defined Networking (SDN) and Network Function Virtualization (NFV)*
- o Edge and Fog Computing for Smart Networks*
- o Green Networking and Energy-Efficient Protocols*
- o High-Performance Computing (HPC) for Large-Scale Network Simulations*
- o AI-Driven Network Management and Traffic Optimization*
- o Digital Twin for Network and Infrastructure Modelling*
- o Quantum Networking and Communication*

### **Track 2: Wireless Communications, IoT, and Edge Computing**

- o Intelligent Wireless Networks and Smart Antenna Technologies*
- o 5G/6G technologies*
- o Internet of Things (IoT)*
- o Security and Privacy in IoT and Edge Computing Systems*

## **About Vignan University**

Vignan University, officially Vignan's Foundation for Science, Technology, and Research (VFSTR), is a Deemed university in Guntur, Andhra Pradesh, established in 2008. It offers various undergraduate, postgraduate, and doctoral programs in engineering, science, management, and humanities. Known for its quality education, the university has an 'A+' NAAC accreditation and NBA accreditation. Vignan ranks 72nd in the NIRF Engineering category and has five ABET-accredited programs. The university emphasizes practical learning through internships and projects while fostering a vibrant campus life.

## About Dept. of Computer Science & Engineering

The Department of Computer Science and Engineering (CSE), established in 1997, is crucial to advancing various engineering disciplines and is accredited by ABET and NBA. It offers B.Tech, M.Tech, and Ph.D. programs, supported by around 80 qualified faculty members specializing in areas like databases, data mining, and artificial neural networks. Faculty engage in extensive research, contributing to numerous publications. The department fosters student creativity through symposiums and in-plant training programs, enhancing technical skills in computing.

- o *UAV and Satellite-Based Wireless Communication Networks*
- o *Edge Computing and Federated Learning*
- o *Block-chain for Secure IoT Applications*
- o *Smart Cities and Intelligent Transportation Systems*

### **Track 3: Cybersecurity, Block-chain, and Trust Computing**

- o *Intrusion Detection and Prevention*
- o *Block-chain and Distributed Ledger Technologies for Security*
- o *Zero Trust Security Models for Next-Gen Networks*
- o *Privacy-Preserving Machine Learning for Cybersecurity*
- o *Post-Quantum Cryptography and Secure Key Management*
- o *Secure Authentication and Access Control in Cloud & IoT*
- o *Cyber-Physical System (CPS) Security and Resilience*

### **Track 4: Soft Computing and Computational Intelligence**

- o *Hybrid Soft Computing Techniques (Neuro-Fuzzy, Genetic-Fuzzy, etc.)*
- o *Evolutionary and Swarm Intelligence for Large-Scale Optimization*
- o *Reinforcement Learning for Autonomous Systems*
- o *Fuzzy Logic for Control and Decision-Making*
- o *Deep Learning and Soft Computing for Pattern Recognition*
- o *Soft Computing in Big Data Analytics and Cloud Computing*
- o *Adaptive Learning and Explainable AI (XAI) Models*

### **Track 5: Machine Learning, and Deep Learning Applications**

- o *AI for Network Optimization and Traffic Prediction*
- o *Deep Learning for Signal Processing and Wireless Networks*
- o *Large-Scale Distributed AI for Cloud and Edge Computing*

- o Natural Language Processing (NLP) for Social Media Analysis*
- o Transformer Models for Image, Video, and Speech Processing*
- o AI-Powered Robotics and Autonomous Systems*
- o Transfer Learning and Few-Shot Learning for Real-World AI Applications*
- o Federated Learning and Privacy-Aware AI Models*

**Track 6 : Computer Vision and Multimedia Processing**

- o Deep Learning for Image and Video Processing*
- o AI-Powered Object Detection and Scene Understanding*
- o Computer Vision for Smart Surveillance and Intelligent Transportation*
- o AI-Based Medical Imaging and Disease Diagnosis*
- o Augmented Reality (AR) and Virtual Reality (VR) in Vision Applications*
- o Vision-Based Traffic and Road Safety Systems*
- o High-Performance Computing for Real-Time Computer Vision*
- o Multi-Modal Learning for Vision and Language Processing*

**Important Dates**

Opening Date for Paper Submission	25/01/2025
Closing Date for Paper Submission	30/04/2025
Notification of Decision(Acceptance / Rejection)	15/05/2025
Registration Open	16/05/2025
Camera-ready Paper Submission Date	25/05/2025
Registration Close	30/05/2025



# ICNSOC

## Paper Submission

*Author Instructions Manuscript Templates for ICNSoC 2025 Proceedings MS Word and pdf templates for ICNSoC 2025 conference papers (US-letter or A4 page size) are provided at: [http://www.ieee.org/conferences\\_events/conferences/publishing/templates.html](http://www.ieee.org/conferences_events/conferences/publishing/templates.html)*

*Authors should abide the ICNSoC-25 guidelines while in the manuscript submission:*

- *US letter (DOC, 30 KB) Updated 2024*
- *A4 (DOC, 30 KB) Updated 2024*
- *LaTeX Template Instructions (PDF, 63 KB) [Be sure to use the template's conference mode.]*
- *Template (ZIP, 700 KB) Updated 2024*
- *LaTeX Bibliography Files (ZIP, 309 KB)*

## Paper Submission Link

*<https://cmt3.research.microsoft.com/User/Login?ReturnUrl=%2FICNSC2025%2F>*



## Overleaf

*When working in Overleaf, the template is available at <https://www.overleaf.com/gallery/tagged/ieee-official>*

*The author of an accepted paper is required to register for the conference at the FULL or LIMITED (member or non-member) rate. Non-refundable registration fees must be paid prior to uploading of camera ready paper.*

## Final Paper Guidelines

*The final paper should be written in English with a maximum paper length of six printed pages including figures.*

*Authors should abide by the ICNSoC-25 guidelines while in the manuscript submission:*

- o *All the papers will be double-blind peer-reviewed for scientific quality by the*





reviewers and the Technical Program Committee. So authors must not include their names and addresses in the papers.

- o Papers must be submitted electronically, in PDF format only.
- o All references must follow the IEEE format of referencing.
- o Authors should follow the IEEE Plagiarism policies.

### Proceedings

*ICNSoC 2025 Proceedings will be published by Conference Publishing Services. Further, proceedings will be submitted to Xplore and the Computer Society Digital Library.*



# ICNSOC

## Registration Fee Details

### Notification of Acceptance

- o After the committee makes a decision, we send delegates an acceptance letter allowing them to register for the conference.
- o Listeners from the area of computing can duly register for the Pre-Conference and Conference Sessions.

### Registration Documents

1. Final Camera Ready Paper
2. Copyright form
3. Payment Proof

*Note: Confirmation of your registration will be sent by email within 2 working days of received.*

### Registration Fee

Category	Indian Delegates	Foreign Delegates
Research Scholars / Students	Rs. 8000	US\$ 150
Faculty / Industry	Rs. 9000	US\$ 180
Listeners / Co-authors	Rs. 3000	US\$ 75

### Contact Us

*VFSTR Deemed to be University, Vadlamudi,  
Guntur, Andhra Pradesh, India, 522213.*

*Contact Through : WhatsApp*

*Email : [contact@icnsc.in](mailto:contact@icnsc.in)*



*Scan the QR Code to Contact*

## SPONSORS

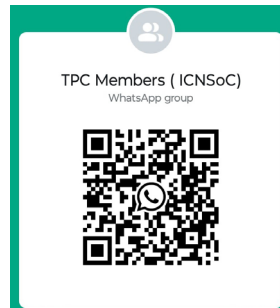
### Financial Sponsors



### Conference Supporters



*If you would like to join TPC of ICNSoC - 2025  
then please scan for the Whatsapp Group*



# ICNSoC



For more Details

Dr. Satish Kumar Satti  
9581236143  
Department of CSE  
Vignan University  
icnsc@vignan.ac.in

Dr. Sunil Babu M  
8333001991  
Department of CSE  
Vignan University  
icnsc@vignan.ac.in

Dr. Vinoj J  
9751489857  
Department of CSE  
Vignan University  
icnsc@vignan.ac.in



**VIGNAN'S**

FOUNDATION FOR SCIENCE, TECHNOLOGY & RESEARCH

(Deemed to be University) - Estd. u/s 3 of UGC Act 1956

Vadlamudi, Guntur - 522 213. Phone : 0863 2344700  
[www.vignan.ac.in](http://www.vignan.ac.in)