

Fifth International Conference on Computing and Network Communications (CoCoNet'23)



Sixth International Conference on Applied Soft Computing and Communication Networks (ACN'23)

December 18-20, 2023, Bangalore, India

CONFERENCE PROGRAM

Organized by

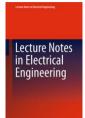


https://coconet-conference.org/2023/

https://acn-conference.org/2023/







Co-affiliated Symposiums

- o 10th Symposium on Control, Automation, Industrial Informatics and Smart Grid (ICAIS'23)
- o 10th Symposium on Natural Language Processing (NLP'23)
- 5th Symposium on Recent Advances in Communication Theory, Information Theory, Antennas and Propagation (CIAP'23)
- o 6th Symposium on Advances in Applied Informatics (SAI'23)
- o 9th International Symposium on Women in Computing and Informatics (WCI'23)
- o 9th Symposium on Computer Vision and the Internet (VisionNet'23)
- o Symposium on Emerging Topics in Computing and Communications (SETCAC'23)
- Symposium on VLSI Design and Embedded Computing (VDEC'23)









Co-located/Co-affiliated Events @ACN'23

- Eighth International Symposium on Intelligent Informatics (ISI'23)
 - Workshop on Computational Intelligence Systems and Applications (CISA-2023)
- 7th International Symposium on Intelligent Systems Technologies and Applications (ISTA'23)
 Workshop on Advances in Computer Vision, Pattern Recognition, Machine Learning and Symmetry (CVPRLMS-2023)
- o 9th International Symposium on Security in Computing and Communications (SSCC'23)
- o 7th International Symposium on Signal Processing and Intelligent Recognition Systems (SIRS'23)





Authors by Country (All Papers, Source: EDAS): Australia, Brazil, Burkina Faso, China, Cyprus, Denmark, Ethiopia, Finland, France, Germany, India, Indonesia, Iraq, Ireland, Italy, Jordan, Kazakhstan, Libya, Luxembourg, Malaysia, Nepal, Nicaragua, Oman, Poland, Romania, Russia, Saudi Arabia, Singapore, South Africa, Sri Lanka, Taiwan, Thailand, Tunisia, Turkey, Ukraine, United Arab Emirates, United Kingdom, USA, Vietnam

Journal Special Issues

- Journal of Intelligent and Fuzzy Systems (JIFS), IOS Press, Netherlands (SCI Impact Factor: 2)
- Connection Science, Taylor & Francis Online (SCI Impact Factor: 5.3)

Keynote Speakers

Dr. C. Mohan, Distinguished Visiting Professor, Tsinghua University, China

Dr. RangaRao Venkatesha Prasad, Faculty of Engineering, Mathematics and Computer Science (EWI), Delft University of Technology (TU Delft), The Netherlands

Dr. Sanjay K Madria, Curators' Distinguished Professor, Dept. of Computer Science, Missouri University of Science and Technology, Rolla, USA

Dr. Vishwas Lakkundi, Data Protection Officer, Smarten Spaces, Bangalore, India

Dr. S. R. Mahadeva Prasanna, *Professor, Dept. of Electrical Engineering, Indian Institute of Technology Dharwad, India*

Dr. Sri Krishnan, Professor of Electrical, Computer Engineering, and Biomedical Engineering Metropolitan University, Toronto, Canada













Tutorials

Dr. Abdullah Uz Tansel, Professor, Baruch College and The Graduate Center, City University of New York, USA

Title: Blockchain as a Database, Communication Networks and Web 3.0 (90 minutes)

Dr. Nithin Nagaraj, Associate Professor, Consciousness Studies Programme, National Institute of Advanced Studies, Indian Institute of Science Campus, Bengaluru

Title: Brain-Inspired Computing, Communication and Machine Learning (90 minutes)

Dr. Amitava Mukherjee, *Professor, School of Computing, Amrita Vishwa Vidyapeetham* (University), Kollam, Courtesy Professor, College of Nano Science and Engineering, University at Albany, USA

Title: 5G IoT Implementation and Management: From the Edge to the Cloud in Industry 4.0 (90 minutes)

Dr Vishnu Srivastava, *Ex Emeritus Scientist (CSIR) and Emeritus Professor (Ac-SIR), CSIR-Central Electronics Engineering Research Institute, Pilani, India*

Title: *THz Technology for 6G Communication Network (60minutes)*

Dr. H. L. Shashirekha, Asha Hegde, Mangalore University, India

Title: Word-level Language Identification in Code-mixed Dravidian Languages (90 minutes)

Karthik Sivarama Krishnan, Senior AI Software Engineer (Research), Gen Nine Inc, USA

Title: *Countering Audio Deepfakes: Introduction to Multi-Feature Audio Authenticity Network (MFAAN) (90 minutes)*

Dr. Jaya Dofe, *Dept. of Electrical and Computer Engineering, California State University, Fullerton, California, USA*

Title: Securing the Vertical Frontier: Advancing Hardware Security through 3D Integration (60 minutes)















Conference Highlights

- o Keynote Talks
- Parallel Technical Sessions
- o Best Paper Sessions
- o Best Paper Awards
- o Invited Talks
- o Tutorials

- o Symposiums & Workshops
- o Panel Discussions
- o Start-up Expo
- o Lightning Talks
- o Hot off the Press
- o Hands-on Sessions

Cultural Events followed by Banquet Dinner

December 19, 2023, 6.30 PM Venue: PES University

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Hands-on Session: Deep learning approach for intelligent malware detection system (December 19, 2023, 4.30 pm - 5.30 pm)



Dr. Vinayakumar Ravi, *Center for Artificial Intelligence, Prince Mohammad Bin Fahd University, Khobar, Saudi Arabia*

Program at a Glance

December	18, 2023 (Monday)	
9:00 - 11:00	Registration	
9:30 - 10:30	Conference Inauguration GJE	3C Auditorium
10:30 -11:00	Break	
11:00 - 12:00	Keynote: Efficient Revocation in Attribute-based Encryption Scheme for Secure Data Sh	aring in Cloud
	Speaker: Dr. Sanjay K Madria, Curators' Distinguished Professor, Department of CompuMissouri University of Science and Technology, Rolla, MO 65409, USAGJ	ter Science, BC Auditorium
12:00 - 13:00	Keynote: Taking IoT to the Extreme	
	Speaker : Dr. RangaRao Venkatesha Prasad , Faculty of Engineering, Mathematics and Co (EWI), Delft University of Technology (TU Delft), The Netherlands	
13:00 - 13:45		BC Auditorium
	Lunch Break	
13:45 - 15:15	Tutorial: Blockchain as a Database, Communication Networks and Web 3.0	
15.45 - 15.15	Speaker: Dr. Abdullah Uz Tansel, Professor, Baruch College and The Graduate Center, C New York, USA	
	Be block-t Tutorial: Securing the Vertical Frontier: Advancing Hardware Security through 3D Integ	6th floor Seminar Ha
13:45 - 15:15	Speaker: Dr. Jaya Dofe, Assistant Professor, Dept. of Electrical and Computer Engineerir	
	University Fullerton California USA	7th floor Seminar Ha
Parallel Techni	cal Sessions	
	ACN-01: International Conference on Applied Soft Computing and Communication Ne	tworks B-606
	CoCoNet-SOA: Network Communications	B-611
	CoCoNet-S1: Image and Signal Processing/Machine Learning/Pattern Recognition	
		B-702
::15	ISTA-01: Selected Papers: Seventh International Symposium on Intelligent Systems Applications (ISTA'23)	Technologies and
- 18:15		Technologies and B-711
5:20 - 18:15	Applications (ISTA'23)	Technologies and B-711
15:20 - 18:15	Applications (ISTA'23) ISTA-02: Intelligent Image Processing and Artificial Vision (Seventh International	Technologies and B-711 Il Symposium on
15:20 - 18:15	Applications (ISTA'23) ISTA-02: Intelligent Image Processing and Artificial Vision (Seventh International Intelligent Systems Technologies and Applications)	Technologies and B-711 Il Symposium on B-712 B-608
15:20 - 18:15	Applications (ISTA'23) ISTA-02: Intelligent Image Processing and Artificial Vision (Seventh International Intelligent Systems Technologies and Applications) ISI-01: 8th International Symposium on Intelligent Informatics (ISI'23)	Technologies and B-711 Il Symposium on B-712 B-608 Il Systems
15:20 - 18:15	 Applications (ISTA'23) ISTA-02: Intelligent Image Processing and Artificial Vision (Seventh International Intelligent Systems Technologies and Applications) ISI-01: 8th International Symposium on Intelligent Informatics (ISI'23) SIRS-01: 7th International Symposium on Signal Processing and Intelligent Recognition 	Technologies and B-711 al Symposium on B-712 B-608 a Systems B-607
12:20 - 18:0	 Applications (ISTA'23) ISTA-02: Intelligent Image Processing and Artificial Vision (Seventh International Intelligent Systems Technologies and Applications) ISI-01: 8th International Symposium on Intelligent Informatics (ISI'23) SIRS-01: 7th International Symposium on Signal Processing and Intelligent Recognition SSCC: 9th International Symposium on Security in Computing and Communications CoCoNet'23/ACN'23 Special Session-A 	Technologies and B-711 al Symposium on B-712 B-608 a Systems B-607 B-706

09:00 - 10:00	Tutorial (Online) : Countering Audio Deepfakes: Introduction to Multi-Feature Audio Authenticity N Speaker: Karthik Sivarama Krishnan , Senior Al Software Engineer (Research), Gen Nine Inc, USA	
	GJBC Audit Keynote: Artificial Intelligence (AI): Past, Present and Future	orium
10:00 - 11:00	Speaker: Dr. C. Mohan, Distinguished Visiting Professor, Tsinghua University, China	
	GJBC Audit	orium
11.00 – 11.20	Break	
11:20 - 12:10	Industry Keynote 1: Enterprise IoT: Security & Device Management	
	Speaker: Dr. Vishwas Lakkundi, Data Protection Officer, Smarten Spaces, Bangalore, India GJBC Audit	orium
12:10 – 13:00	Industry Keynote 2: Equipment Intelligence in Wafer Fabrication Equipment (WFE)	
	Speaker: Mrinal Kumar, Staff Systems Engineer, Lam India, Bangalore, India GJBC Audit	orium
13:00 - 13:50	Lunch Break	
	Tutorial: Brain-Inspired Computing, Communication and Machine Learning	
13:50 - 15:20	Speaker: Dr. Nithin Nagaraj, Associate Professor, Consciousness Studies Programme, National Inst Advanced Studies, Indian Institute of Science Campus, Bengaluru Be block-6th floor	-
	Tutorial : 5G IoT Implementation and Management: From the Edge to the Cloud in Industry 4.0	
13:50 - 15:20	Speaker: Dr. Amitava Mukherjee, Professor, School of Computing, Amrita Vishwa Vidyapeetham (University), Kollam, Courtesy Professor, College of Nano Science and Engineering, University at A USA Be block-7th floor	-
Parallel Techni	ical Sessions	
	CoCoNet-S3: 9th International Symposium on Computer Vision and the Internet (VisionNet'23) /: Symposium on Natural Language Processing (NLP'23)	10th B-702
	Symposium on Mutural Eanguage (New 25)	
	CoCoNet-S4: Symposium on Emerging Topics in Computing and Communications (SETCAC'23)	B-706
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45	CoCoNet-S4: Symposium on Emerging Topics in Computing and Communications (SETCAC'23)	B-706
- 17:45	CoCoNet-S4: Symposium on Emerging Topics in Computing and Communications (SETCAC'23) CoCoNet-S0B: Network Communications	B-706 B-611
5:30 - 17:45	CoCoNet-S4: Symposium on Emerging Topics in Computing and Communications (SETCAC'23) CoCoNet-S0B: Network Communications ACN-02: International Conference on Applied Soft Computing and Communication Networks	B-706 B-611 B-606
15:30 - 17:45	CoCoNet-S4: Symposium on Emerging Topics in Computing and Communications (SETCAC'23) CoCoNet-S0B: Network Communications ACN-02: International Conference on Applied Soft Computing and Communication Networks CoCoNet-S5: Image and Signal Processing/Machine Learning/Pattern Recognition	B-706 B-611 B-606 B-707
15:30 - 17:45	CoCoNet-S4:Symposium on Emerging Topics in Computing and Communications (SETCAC'23)CoCoNet-S0B:Network CommunicationsACN-02:International Conference on Applied Soft Computing and Communication NetworksCoCoNet-S5:Image and Signal Processing/Machine Learning/Pattern RecognitionCoCoNet-S6:6th Symposium on Advances in Applied Informatics (SAI'23)	B-706 B-611 B-606 B-707 B-612
15:30 - 17:45	CoCoNet-S4:Symposium on Emerging Topics in Computing and Communications (SETCAC'23)CoCoNet-S0B:Network CommunicationsACN-02:International Conference on Applied Soft Computing and Communication NetworksCoCoNet-S5:Image and Signal Processing/Machine Learning/Pattern RecognitionCoCoNet-S6:6th Symposium on Advances in Applied Informatics (SAI'23)CoCoNet-S7:Internet of Things/Assistive Technologies/Cyber Security	B-706 B-611 B-606 B-707 B-612 B-602 B-711
15:30 - 17:45	CoCoNet-S4: Symposium on Emerging Topics in Computing and Communications (SETCAC'23) CoCoNet-S0B: Network Communications ACN-02: International Conference on Applied Soft Computing and Communication Networks CoCoNet-S5: Image and Signal Processing/Machine Learning/Pattern Recognition CoCoNet-S6: 6th Symposium on Advances in Applied Informatics (SAI'23) CoCoNet-S7: Internet of Things/Assistive Technologies/Cyber Security ISTA-03: Intelligent Tools and Techniques (7th International Symposium on Intelligent Systems Technologies and Applications)	B-706 B-611 B-606 B-707 B-612 B-602 B-711
15:30 - 17:45	CoCoNet-S4: Symposium on Emerging Topics in Computing and Communications (SETCAC'23) CoCoNet-S0B: Network Communications ACN-02: International Conference on Applied Soft Computing and Communication Networks CoCoNet-S5: Image and Signal Processing/Machine Learning/Pattern Recognition CoCoNet-S6: 6th Symposium on Advances in Applied Informatics (SAI'23) CoCoNet-S7: Internet of Things/Assistive Technologies/Cyber Security ISTA-03: Intelligent Tools and Techniques (7th International Symposium on Intelligent Systems Technologies and Applications) ISTA-04: Applications using Intelligent Techniques (seventh International Symposium on Intelligent Systems Technologies and Applications)	B-706 B-611 B-606 B-707 B-612 B-602 B-711
	CoCoNet-S4: Symposium on Emerging Topics in Computing and Communications (SETCAC'23) CoCoNet-S0B: Network Communications ACN-02: International Conference on Applied Soft Computing and Communication Networks CoCoNet-S5: Image and Signal Processing/Machine Learning/Pattern Recognition CoCoNet-S6: 6th Symposium on Advances in Applied Informatics (SAI'23) CoCoNet-S7: Internet of Things/Assistive Technologies/Cyber Security ISTA-03: Intelligent Tools and Techniques (7th International Symposium on Intelligent Systems Technologies and Applications) ISTA-04: Applications using Intelligent Techniques (seventh International Symposium on Intelligent Systems Technologies and Applications) ISI-02: 8th International Symposium on Intelligent Informatics (ISI'23) SIRS-02: 7h International Symposium on Signal Processing and Intelligent Recognition Systems Start-un Expo: Enaturing Cutting-Edge Products	B-706 B-611 B-606 B-707 B-612 B-602 B-711 B-608 B-607
15.00 – 18: 00	CoCoNet-S4: Symposium on Emerging Topics in Computing and Communications (SETCAC'23) CoCoNet-S0B: Network Communications ACN-02: International Conference on Applied Soft Computing and Communication Networks CoCoNet-S5: Image and Signal Processing/Machine Learning/Pattern Recognition CoCoNet-S6: 6th Symposium on Advances in Applied Informatics (SAI'23) CoCoNet-S7: Internet of Things/Assistive Technologies/Cyber Security ISTA-03: Intelligent Tools and Techniques (7th International Symposium on Intelligent Systems Technologies and Applications) ISTA-04: Applications using Intelligent Techniques (seventh International Symposium on Intelligent Systems Technologies and Applications) ISI-02: 8th International Symposium on Intelligent Informatics (ISI'23) SIRS-02: 7h International Symposium on Signal Processing and Intelligent Recognition Systems Start-un Expo: Enaturing Cutting-Edge Products	B-706 B-611 B-606 B-707 B-612 B-602 B-711 B-608 B-608 B-607
15 :00 – 18:00 16:30 - 18:00	CoCoNet-S4: Symposium on Emerging Topics in Computing and Communications (SETCAC'23) CoCoNet-S0B: Network Communications ACN-02: International Conference on Applied Soft Computing and Communication Networks CoCoNet-S5: Image and Signal Processing/Machine Learning/Pattern Recognition CoCoNet-S6: 6th Symposium on Advances in Applied Informatics (SAI'23) CoCoNet-S7: Internet of Things/Assistive Technologies/Cyber Security ISTA-03: Intelligent Tools and Techniques (7th International Symposium on Intelligent Systems Technologies and Applications) ISTA-04: Applications using Intelligent Techniques (seventh International Symposium on Intelligent Systems Technologies and Applications) ISTA-04: Applications using Intelligent Techniques (ISI'23) SIRS-02: 7h International Symposium on Signal Processing and Intelligent Recognition Systems Start-up Expo : Featuring Cutting-Edge Products Be bi	B-706 B-611 B-606 B-707 B-612 B-602 B-711 B-608 B-608 B-607 lock-6th flo

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December 20, 2023 (Wednesday)		
9:30 - 10:30	Keynote: Nonlinear Speech Processing by Deep Learning	
	Speaker : Dr. S. R. Mahadeva Prasanna , Professor, Dept. of Electrical Engineering, Indian Institute of Technology Dharwad, India GJBC Auditoriu	
10:30 - 11:00	Break	
	Keynote: Biomedical Signal Analysis and Digital Health (online)	_
11:00 - 12:00	Dr. Sri Krishnan, Professor of Electrical, Computer Engineering, and Biomedical Engineering, Toronto Metropolitan University, Toronto, Canada GJBC Auditoriu	ım
12:00 - 13:15	Tutorial: THz Technology for 6G Communication Network	
	Speaker: Dr. Vishnu Srivastava, Ex Emeritus Scientist (CSIR) and Emeritus Professor (Ac-SIR), CSIR-CentroElectronics Engineering Research Institute, Pilani, IndiaGJBC Auditoriu	
13:15 - 14:00	Lunch Break	
1.1.00 15 00	Tutorial: Word-level Language Identification in Code-mixed Dravidian Languages	
14:00 – 15: 30	Speakers: Dr. H. L. Shashirekha, Asha Hegde, Mangalore University, India Be block-6th floor Seminar H	lall
Parallel Technical Sessions		
	CoCoNet-S8: 9th International Symposium on Women in Computing and Informatics (WCI'23) B-702	
	CoCoNet-S9: 9th International Symposium on Women in Computing and Informatics (WCI'23) B-706	
14:00 - 17:00	CoCoNet-S10: Symposium on VLSI Design and Embedded Computing (VDEC'23)/ 10th Symposium on Control, Automation, Industrial Informatics and Smart Grid (ICAIS'23) B-707	
	CoCoNet-S11: 5th Symposium on Recent Advances in Communication Theory, Information Theory, Antennas and Propagation (CIAP'23)	
	ISTA-05: Networked Systems and Security (Seventh International Symposium on Intelligent Systems Technologies and Applications) B-711	
	ISTA-06: ISTA Workshop on Advances in Computer Vision, Pattern Recognition, Machine Learning and Symmetry (CVPRLMS-2023) B-712	
	ISI-03: 8th International Symposium on Intelligent Informatics (ISI'23) B-608	
	CoCoNet'23/ACN'23 Special Session-B B-602	
16:00 - 17:00	Hot off the Press Be block-6th floor Seminar H	lall
17:00 - 17:40	WCI Panel Discussion (Empowering Women in AI: Navigating the Path to Progress and Innovation) GJBC Auditoriu	ım
17:40 – 18:30	Valedictory Function GJBC Auditoriu	ım
	High Tea	

INSTRUCTIONS TO THE PRESENTERS

ORAL PRESENTATIONS

- All delegates are required to bring a printout of the Order received from Explara (as mentioned in the registration email) along with a photocopy of a valid ID card. The QR Code will be scanned to issue the registration kit.
- Most presentations are scheduled for a maximum duration of 15-20 minutes, which includes time for Q&A.
- Presentations must be in electronic formats such as PowerPoint or PDF only.
- A laptop and projector will be provided in all conference rooms for presenters' use.
- Presenters are requested to arrive at the room at least 10 minutes prior to the session's start and introduce themselves to the session chair. Please sign the register after presenting your paper.
- A speaker rehearsal room will be available for presenters who wish to rehearse their presentations.

YOUR SLIDES

- For a 15-minute presentation, aim for a maximum of 12-15 PowerPoint slides, including the introduction and conclusion.
- Ensure consistent slide layout throughout the presentation.
- Avoid overly detailed content on each slide.
- Use animations moderately; refrain from excessive use.
- Prefer graphs, figures, and flow charts over tables for oral presentations.
- If including videos or interactive materials, embed them within the presentation file (avoid internet access during the presentation). Kindly inform the Conference Office in advance.

Conference Venue

PES University, 100 Feet Ring Road BSK III Stage, Bangalore – 560085



Google Map: PES University





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