

COMSNETS 2022: Debrief



3 – 8 January 2022, Bengaluru, India (Hybrid Conference)

www.comsnets.org

COMSNETS is a premier international conference dedicated to advances in Networking and Communications Systems. The conference is a yearly event for a world-class gathering of researchers from academia and industry, practitioners, and business leaders, providing a forum for discussing cutting edge research, and directions for new innovative business and technology.

The 2022 edition of the conference was the 14th year of the international conference and included a highly selective technical program consisting of submitted papers, a small set of invited papers on important and timely topics from well-known leaders in the field, and poster sessions of work in progress. Focused workshops and panel discussions were held on emerging topics to allow for a lively exchange of ideas. COMSNETS 2022 had 26 Demos & Exhibits from sponsoring organizations, start-ups, including 16 research track demos. International business leaders were invited to share their perspectives and complemented the technical program. In terms of the quality of the papers and presentations, and the number of delegates who attended the conference, this was a highly successful hybrid edition of COMSNETS. Each year, the conference gets better and better, thanks to the immense support that the conference has received from industry and academia from across the globe.

COMSNETS 2022 Statistics

- Total number of Physical attendees: 182
- Total number of Virtual attendees: 207
- Total number of paid registrations: 249
- Total number of travel grant awardees: 63
- Total number of Contributed Papers in the main conference: 47
- Total number of Poster papers in the main conference: 30
- Total number of Demos & Exhibits: 26
- Total number of Graduate Student Forum papers: 5
- Total number of Workshops: 6
 - o Machine Intelligence in Networked Data and Systems (MINDS)
 - LastMileS
 - Cyber Security and Privacy
 - Intelligent Transportation Systems (ITS)
 - NetHealth
 - Standards-Driven Research (SDR)
- Total number of Tutorials: 4
 - Tutorial # 1: Backscatter communication
 - Tutorial # 2: Engineering Networks in the Sky: Challenges and Potential
 - Tutorial # 3: Secure Positioning in Wireless Systems
 - Tutorial # 4: P4 Language and Programmable Data Planes

COMSNETS 2022 Partners

- IEEE
- IEEE ComSoc
- ACM
- ACM SIGCOMM
- ACM SIGMOBILE
- Ministry of Electronics & Information Technology (MeitY), Government of India
- DRDO, Government of India

University Partners

- CMU, USA
- University of Pennsylvania, USA
- Singapore Management University, Singapore
- LSU, USA
- PLAKSHA University, India
- UQIDAR, IIT Delhi
- KAIST, Korea
- IISc, Bangalore
- IIT Delhi
- IIT Kanpur
- IIT Bombay
- IIT Hyderabad
- IIT Kharagpur
- IIT Madras
- IIT Jammu
- IIIT Bangalore, Delhi, Hyderabad
- DA-IICT
- BMSCE, India

COMSNETS 2022 Patrons

Platinum: TCS Research

Gold: Qualcomm, Murty Foundation

Silver: Google, CISCO, Arista, Skymount

Bronze:

- 1. Microsoft
- 2. Singapore Management University (SMU)
- 3. DRDO
- 4. Glaukes Lab
- 5. PLAKSHA University

Technical Partners: TSDSI, IEEE Connecting the Unconnected (CTU)

Eco-Friendly Partner: 14 Trees Foundation

Video Partner: Videoken

Travel Grant Sponsors

- a. ACM SIGMOBILE
- b. ACM SIGCOMM
- c. LRN Foundation, India

Key Highlights of COMSNETS 2022

- Keynote Speakers
 - Dina Katabi, MIT, USA
 - Arogyaswami Paulraj, Stanford University, USA
 - Lili Qiu, University of Texas at Austin, USA
 - o Rajesh Sundaresan, IISc Bangalore, India
 - Ellen W. Zegura, College of Computing, Georgia Tech, USA
- Industry Insights Keynotes
 - Pramod Badjate, Arista Networks, USA
 - Chris Galliano, Skymount Medical Group, USA
 - Arpan Pal, TCS Research, India
- Invited Speakers
 - Ana Aguiar, University of Porto, Portugal
 - Avhishek Chatterjee, IIT Madras, India
 - Sreelakshmi Manjunath, IIT Mandi, India
 - Sudip Misra, IIT Kharagpur, India
 - Supratik Mukhopadhyay, Louisiana State University, USA
 - Srinivas Narayana, Rutgers University, USA
 - Neeraja Sahasrabudhe, IISER Mohali, India
 - Arunesh Sinha, Singapore Management University, Singapore
 - Elahé Soltanaghai, University of Illinois Urbana-Champaign, USA
 - Koji Yatani, The University of Tokyo, Japan
 - Xia Zhou, Dartmouth College, USA

Panel Discussions

- 1. Probe the Experts by PhD students
- 2. Private 5G vs WiFi6? Will Enterprise and campus networking exist as we know it?
- 3. Intent based Networks Has the promise of AI truly been realized in networking?

• Women-in-Engineering

• Theme: Technology Innovations in the ICT Domain to Combat Covid 19

• COMSNETS 2022 Workshops

- MINDS
- LastMileS
- Cyber Security and Privacy
- ITS
- NetHealth
- Standards-driven Research

Memories of (Hybrid) COMSNETS 2022

Tuesday, 4th January 2022



























tos

Wednesday, 5th January 2022



































Thursday, 6th January 2022





























Friday, 7th January 2022



















Saturday, 8th January 2022

















Amazing Team Work @ COMSNETS 2022







COMSNETS 2022 Awards

Best Paper Award:

NUMASFP: NUMA-aware Dynamic Service Function Chain Placement in Multi-core Servers, Mr. Venkatarami Reddy Chintapalli, Mr. Sai Balaram Korrapati, Prof. Bheemarjuna Reddy Tamma and Dr. Antony Franklin A

Indian Institute of Technology Hyderabad, India

Best Poster Award:

- IEEE 802.15.4e-TSCH MAC Stack Extensions to GNU Radio,
 Ipsita Sanyal and Prabhakar Venkata T. (Indian Institute of Science, India)
- Analysis of Queuing Delay in LTE System: Model and Validation
 Megha Sahu and Arzad Kherani (Indian Institute of Technology, Bhilai, India)

Best Product Demo Award:

Katonic's MLOps Platform for Operationalizing Al at Scale,

Prem Naraindas, Subhrajit Mohanty (Katonic AI)

Best Research Demo Award:

A universal Maximum Likelihood GRAND Decoder in 40nm CMOS,

Arslan Riaz (Boston University, USA); Muriel Médard (MIT, USA); Ken R. Duffy (Hamilton Institute, Maynooth University, Ireland); Rabia T Yazicigil (Boston University, USA)

Best Research Demo Runner-up Award:

Closed-Loop Automation for 5G Slice Assurance,

Priyanka Naik (IBM Research-India, India); Chander Govindarajan and Seep Goel (IBM Research - India, India); Kavya Govindarajan and Dushyant Behl (IBM Research, India); Amandeep Singh (IBM Texas United States, USA); Matthew Thomas; Utpal Mangla (IBM Consulting, Canada); Praveen Jayachandran (IBM India, India)

Best Graduate Forum Paper Award:

Unconditionally Secure Commitment over Unreliable Noisy Channels,

Manideep Mamindlapally (IIT Kharagpur, India)

Best Workshop Paper Awards:

Workshop	Best Paper Title	Authors
Cyber Security and Privacy	People to People (P2P) Privacy in Mobile Devices	Arun Kumar Jindal; Vijayanand Banahatti; Sachin Lodha
Cyber Security and Privacy	ProphetChain: Hostaging the Blockchain with Ransom Block Release	Aditya Ahuja
Intelligent Transportation Systems	IoT-Assisted Low-Cost Traffic Volume Measurement and Control	Chandra Shekhar, Sudipta Saha
LastMileS	VISTA: Fast and Efficient Traffic Surveillance by Video Tile Sampling	Shubham Chaudhary, Aryan Taneja, Anjali Singh, Mukulika Maity, Arani Bhattacharya
NetHealth	Research Study and System Design for Evaluating Student Stress in Indian Academic Setting	Pavan Kumar Reddy Yannam; Vineet Venkatesh; Manik Gupta
MINDS	DEFER: Distributed Edge Inference for Deep Neural Networks	Arjun Parthasarathy and Bhaskar Krishnamachari

ANNOUNCING COMSNETS 2023

After the huge success of COMSNETS 2022, the next edition of the conference has been announced by the Steering Committee.

COMSNETS 2023 will be held from 3 to 8 January 2023 at the Chancery Pavilion Hotel, Residency Road, Bangalore, India.

More than 500 delegates are expected to attend COMSNETS 2023. The conference will continue to partner with IEEE COMSOC, ACM SIGCOMM, ACM SIGMOBILE, Meity, Government of India & DRDO.

The COMSNETS 2023 home page will be up and running by the middle of February 2022.

See you all in Bangalore, India in January 2023.

STAY SAFE & HEALTHY

THANK YOU

