

Communication Software Technical Committee

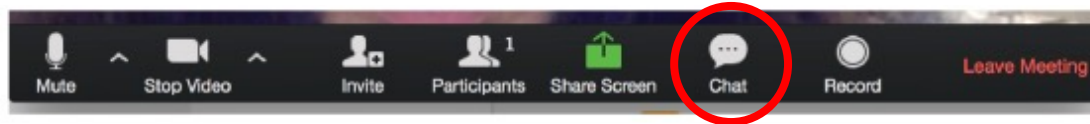
Tuesday November 29rd, 2022

Agenda

- Welcome and Introduction by the TC Chair
- Approval of minutes for meetings at ICC22
- SIG Activities
- Updates on e-Letter
- TC endorsed conferences
- Technical Achievement Award
- Election position of the secretary: Election process and presentation of the candidates
- TC restructure Update
- Miscellanies

Welcome and Introduction by the TC Chair

- ▶ 2~3 Minutes
- ▶ Kindly state your name, affiliation and email in the chat
 - e.g., First Last, Good University, first.last@gooduniversity.edu



Technical Group Name	Meeting Date	Meeting Time	Zoom Link	Zoom Passcode	Technical Group Type	Duration (hours)
TCGCC	11/15/2022	9:00:00 AM	https://zoom.us/j/99326377413?pwd=dFRZcGhLbWljZ01hdkpMM0k3VXdQUT09	847409	Technical Committee	2
CSIM	11/16/2022	1:00:00 PM	https://zoom.us/j/91715013628?pwd=Wi9aSzNKd2lnSVNyQVNPtktZytZz09	880714	Technical Committee	1
Communication Theory TC	11/17/2022	11:00:00 AM	https://zoom.us/j/93467940060?pwd=WGVsbm9tZUZZWGowM3Z2NExQQ2xCdz09	227327	Technical Committee	1
WTC	11/17/2022	12:00:00 PM	https://zoom.us/j/94828468604?pwd=ck13aWR1NWxPQzRRdkk3b2JwVWxYZz09	902855	Technical Committee	1.5
Next Generation Multiple Access Emerging Technology Initiative	11/17/2022	7:00:00 AM	https://zoom.us/j/98393428194?pwd=M1hHQlclxaGtaeWxnMGE1R1prNDEvdz09	670229	Emerging Technologies Initiatives	1
Communications Quality and Reliability	11/18/2022	9:00:00 AM	https://zoom.us/j/98213366519?pwd=NIZRRSswZDJWtM5FOIIZDlxS3hXZz09	93972	Technical Committee	1
Multimedia Communications Technical Committee	11/20/2022	9:00:00 AM	https://zoom.us/j/97350161608?pwd=Y09mZ2REMgXz3ZFBHMlnRi9WtZhlZz09	98448	Technical Committee	2
Big Data	11/20/2022	9:00:00 AM	https://zoom.us/j/95798989121?pwd=cEI0SUIncTV0STF3TfPyRXVIZmlSQOT09	522973	Technical Committee	1.5
Social Networks	11/21/2022	11:00:00 AM	https://zoom.us/j/99480287846?pwd=MnpMK0p3ajkxVFN1tM5WVFNpcTREQT09	264593	Technical Committee	1.5
Technical Committee on Power Line Communications	11/21/2022	11:30:00 AM	https://zoom.us/j/96647819215?pwd=Uk5TM1JqS3h4d3Z3eDRGNm5RYUZSUOT09	229389	Technical Committee	2
Tactile Internet	11/22/2022	12:30:00 PM	https://zoom.us/j/99346934013?pwd=T2Eybo1uSG9BNIBOTFVUVEGE3SnRLUT09	896927	Technical Committee	1.5
Internet of Things, Ad Hoc and Sensor Networks (IoT-AHSN TC)	11/23/2022	9:00:00 AM	https://zoom.us/j/92903592416?pwd=L2wzeGVkNG5sQl9QNfWMTQzbWladz09	359648	Technical Committee	2
QCIT	11/24/2022	9:00:00 AM	https://zoom.us/j/94858988229?pwd=clBibkc3QVpQdJODdEsvSnd0MGI1QT09	759270	Emerging Technologies Initiatives	3
Aerial Communications	11/25/2022	9:30:00 AM	https://zoom.us/j/95162251085?pwd=THB4VmZjc3Vocy8wMk5VYUUpqNTVudz09	258867	Emerging Technologies Initiatives	1
Internet TC	11/25/2022	8:00:00 AM	https://zoom.us/j/92700770597?pwd=MWRCRHV2NjdTS21MS3FuUk4vRiNzdz09	961006	Technical Committee	1.5
Communications and Information Security Technical Committee	11/28/2022	9:00:00 AM	https://zoom.us/j/96647744421?pwd=bEpuR25RdHplIM1M1WGFKeTBvM2NsSdz09	290944	Technical Committee	1
Molecular, Biological and Multi-Scale Communications Technical Committee (TCIN) – Information Infrastructure and Networking Technical Committee	11/28/2022	9:00:00 AM	https://zoom.us/j/92370483454?pwd=aGswWjBDRzRqcHYyYalHUQ1INZ29vdx09	882251	Technical Committee	1.5
	11/28/2022	9:00:00 AM	https://zoom.us/j/95819569296?pwd=eUxSMmxJVfEgYVWZQYk1TWHNwclNldz09	46432	Technical Committee	1.5
ONTC	11/28/2022	8:00:00 AM	https://zoom.us/j/91969803459?pwd=NGZSOU94OTRESWZxOXVBL05PY2J1Zz09	667126	Technical Committee	2
Data Storage	11/29/2022	11:30:00 AM	https://zoom.us/j/97545696886?pwd=eG53SXI2aHVaOGp1SFB6NlFROU1FUT09	542234	Technical Committee	1
IEEE Communication Software	11/29/2022	2:00:00 PM	https://zoom.us/j/97973461021?pwd=YnRtZHBKJ21tR0R0sQlhHelg5dkxjUT09	977813	Technical Committee	1.5
ETI Backhaul/Fronthaul	11/29/2022	2:00:00 PM	https://zoom.us/j/91428403307?pwd=UDNyUEcycVJ2UmJoaXBLYVY5dm1YQT09	204803	Emerging Technologies Initiatives	1
SPCC	11/29/2022	8:30:00 AM	https://zoom.us/j/95653230156?pwd=MWhtZWQwaFNDUdH4dWVt2WmFiaXc1QT09	306539	Technical Committee	1
Radio Communications	11/29/2022	9:00:00 AM	https://zoom.us/j/96414820199?pwd=UihVUHhpKZ2cyK0tSU2ZBbn15eXBcdz09	168648	Technical Committee	1.5
Communications Switching and Routing (CSR)	11/29/2022	7:00:00 AM	https://zoom.us/j/97214276981?pwd=TXVpUi9TTVNnK3JaNzdMNINneTZJQT09	422397	Technical Committee	2
eHealth	11/29/2022	8:30:00 AM	https://zoom.us/j/96851754433?pwd=U3FHY3NpU04xOHV5RUpHwGxoemNCQT09	80857	Technical Committee	1
Machine Learning for Communications and Networking	11/30/2022	9:00:00 AM	https://zoom.us/j/94341799937?pwd=VG5mOTJhYnZ6b2R3RwxFY1RTdEhnUT09	103304	Emerging Technologies Initiatives	1
IEEE Technical Committee on Cognitive Networks (TCCN)	11/30/2022	8:00:00 AM	https://zoom.us/j/99500704787?pwd=Z2t0RG56eXl1eikV3c1a0ZqUWlwdz09	755648	Technical Committee	1
Integrated Sensing and Communication	11/30/2022	8:00:00 AM	https://zoom.us/j/96741900618?pwd=eDZSaHpt4TjBjN3hkd2dZejJBT29oQT09	57792	Emerging Technologies Initiatives	2
TAOS	11/30/2022	9:00:00 AM	https://zoom.us/j/94850131988?pwd=bHJSOG5uc0l5QzI0S2JzYmRVakRTdz09	590974	Technical Committee	1

Chair's Welcome, and Member Introductions

▶ Mission

- “The mission of this committee is to advance the state of the art in communications software and its various aspects and applications. It serves as the major forum for discussion among communications software professionals in both of the communications and computer industries.”

▶ More than 420 members in the mailing list

▶ Executives for the current term (2021-2022)

- **Chair** Abdellatif Kobbane
- **Vice-Chair** Abd-Elhamid Taha
- **Secretary** Hassine MOUNGLA

IEEE
ComSoc
CommSoft TC

Approval of minutes for meetings at ICC22

- ▶ Minutes were posted on the website

Update on Website

► Editor: Hassine Moun gla

► Website

- Website maintained and with all TC news and updates posted (minutes, agendas, symposium information, ...)
- Open for suggestion on usability and ease of access

Special Interest Groups (SIGs)

► Coordinator – Marwane Ayaida

- The VP on Technical Committee confirmed the need that each TC has SIGs
- More precisely, TCB P&Ps states “Special Interest Groups (SIGs) help the TC foster the scientific and technological development in topical emerging technologies within the scope of the TC. SIGs may be created to promote activities in well-established technologies.”

CommSoft TC SIGs

Coordinator – Marwane Ayaida

- ▶ Special Interest Group on “ML and AI for Networking”
 - Coordinator : Dr. Melike Erol-Kantarci (Melike.erolkantarci@uottawa.ca)
- ▶ Special Interest Group on “NFV and SDN technologies”
 - Coordinator : Prof. Sudip Misra (smisra.editor@gmail.com)
- ▶ Special Interest Group on “Security in Software Communication”
 - Coordinator : Dr. Safa Otoum (Safa.Otoum@zu.ac.ae)
- ▶ Special Interest Group on “Big Data and Communication software”
 - Coordinator : Dr. Hassine Moun gla (hassine.moungla@parisdescartes.fr)
- ▶ Special Interest Group on “Blockchains and Applications”
 - Coordinator : Dr. Moayad Aloqaily (malogaily@xanalytics.ca)
- ▶ Special Interest Group on “Communication software for Vehicular AdHoc Networks”
 - Coordinator : Prof. Hacene Fouchal (Hacene.Fouchal@univ-reims.fr)
- ▶ Special Interest Group on “Performances Evaluation”
 - Coordinator : Prof. Abdellatif Kobbane (abdellatif.kobbane@um5.ac.ma)

SIG on ML and AI for Networking

Head: Melike Erol-Kantarci

Keynotes

- Plenary Keynote on “Deep and Reinforcement Learning in 5G and 6G: New Horizons with Transfer Learning,” IEEE Future Networks World Forum, Montreal, October 12th, 2022.
- Keynote on “AI-Enabled Smart Grid Communications and Transactive Energy Systems, ” IEEE SmartGridComm, October 2022.

DLs:

- “Deep and Reinforcement Learning in 5G and 6G,” IEEE Distinguished Lecturer Series – IEEE ComSoc Atlanta and Virginia Sections, 26 May 2022.
- “Deep and Reinforcement Learning in 5G and 6G,” IEEE Distinguished Lecturer Series – IEEE ComSoc Oregon, Santa Clara Valley, Seattle Foothill, San Fernando Valley Chapters, 27 April 2022.
- “Deep and Reinforcement Learning in 5G and 6G,” IEEE Distinguished Lecturer Series – IEEE ComSoc Bangalore Chapter, 8 January 2022.

SIG on ML and AI for Networking

Head: Melike Erol-Kantarci

Industry talks

- “Bolstering Enterprise Digitization with AI and 5G Convergence,” NVIDIA GTC Conference, March 23rd 2022. [Co-presented w\ Eric Parsons, Ericsson].

Panels

- Panelist for “Green Networking in B5G: Challenges & Opportunities,” 6G Flagship Program, April 2022.

Special issues:

- Special Issue on “6G the Next Frontier: Theories, Technologies and Applications” (Elsevier Computer Networks) 2022.
- Special Issue on “AI for Open Programmable Virtualized Networks in 6G,” (IEEE Wireless Communications) 2022.
- Special Issue on “Integrated and autonomous network management and control for 6G time critical application (ITU Journal) 2022.

SIG on NFV and SDN technologies

Head: Sudip Misra

Conference organization involvement:--

- **Panel Chair**, IEEE/ACM international conference on Connected Health: Applications, Systems and Engineering Technologies (CHASE), Orlando, Florida, USA, June 21-23, 2023. (**Sudip Misra**)
- **Workshop Chair**, IEEE GLOBECOM 2021 Workshop “SIGNIS: Softwarized Next Generation Networks for IoT Services Workshop”, December 2021. (**Sudip Misra**)
- **Track Chair**, Communication Networks, Cloud computing and IoT Track, 3rd International Conference on Frontiers in Computing and Systems (COMSYS), 2022, Springer (**Arijit Roy and Ayan Mondal**)
- **Co-chair**, Workshop on AI/ML for Edge/Fog Networks co-located with the IEEE INFOCOM 2022 (**Arijit Roy and Ayan Mondal**)
- **Co-chair**, The 2nd Workshop on Softwarized Next Generation Networks for IoT Services co-located with the IEEE ICC 2023 (**Arijit Roy and Ayan Mondal**)
- Workshop on Internet of Things: Trends and Applications, November 3-5, 2022, Indian Institute of Information Technology Sri City, India (**Arijit Roy**)

SIG on NFV and SDN technologies

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- **Co-chair**, The 2nd Workshop on Softwarized Next Generation Networks for IoT Services co-located with the IEEE ICC 2023 (**Arijit Roy and Ayan Mondal**)
- Workshop on Internet of Things: Trends and Applications, November 3-5, 2022, Indian Institute of Information Technology Sri City, India (**Arijit Roy**)
- **Co-chair: Arijit Roy and Program Chair: Ayan Mondal** on a workshop on Cloud, Edge, and Fog for Smart Industries, co-located with IEEE/ACM CCGrid 2023

SIG on NFV and SDN technologies

Head: Sudip Misra

Honours/Awards/Distinguished recognitions:--

- Received the “Faculty Excellence Award” of IIT Kharagpur at the Professor level, 2022 (**Sudip Misra**).
- Received Fellowship of Institute of Electrical and Electronics Engineers (FIEEE), 2022 (**Sudip Misra**).
- **Sudip Misra**’s paper entitled “Enabling Green Mobile-Edge Computing for 5G-Based Healthcare Applications”, is featured in the list of Popular Articles in IEEE Transactions on Green Communications and Networking (TGCN), October 2021.
- **Sudip Misra**’s paper entitled “VIVID: In Vivo End-to-End Molecular Communication Model for COVID-19”, is featured in the list of Popular Articles in IEEE Transactions on Molecular, Biological and Multi-Scale Communications (TMBMSC), October 2021.
- **Ayan Mondal** received the IEEE TCSC Outstanding Ph.D. Dissertation Award 2022

SIG on NFV and SDN technologies

Head: Sudip Misra

Knowledge transfer (tutorial, guest talks, short courses...):--

- **Instructor**, “5G Beyond in Smart Manufacturing”, Short term course in Center of Excellence in Advanced Manufacturing, June 27-July1, 2022. [**Sudip Misra**, jointly with Prof. Surjya K Pal, IIT Kharagpur]
- **Invited Keynote Speaker**, “IoT: Research Opportunities and Challenges”, Second International Conference on Innovations in Software Architecture and Computational Systems (ISACS 2022), Panihati, Kolkata, July 21-22, 2022 (**Sudip Misra**)
- **Invited Lecture**: “Sensing to Communication in IoT”, Professional Development Course on "Smart Manufacturing Industrial Informatics and Internet of Things (IoT)", National Institute of Technology Rourkela, sponsored by Rourkela Steel Plant, an unit of Steel Authority of India Limited (SAIL), India, September, 2022 (**Arijit Roy**)

SIG on NFV and SDN technologies

Head: Sudip Misra

Journal special issue organization/Editorship:--

- Guest Editor, IEEE Journal on Selected Areas in Communications, “Edge-Based Wireless Communications Technologies to Counter Communicable Infectious Diseases”, 2021-2022 (**Sudip Misra**).
- Associate Editor, IEEE Transactions on Network Science and Engineering (2022-Present) (**Sudip Misra**)
- Associate Editor, IEEE Internet of Things Journal (2021-Present) (**Sudip Misra**)
- **Guest Editor**, IoT-based solutions for mitigation of COVID-19 and similar epidemics, Elsevier Smart Health (**Arijit Roy**)
- **Associate Editor**, Frontiers in the Internet of Things (**Arijit Roy and Ayan Mondal**)

SIG on NFV and SDN technologies

Head: Sudip Misra

International webinars:--

- Fourth webinar on Healthcare IoT, jointly conducted by IEEE ComSoc TC eHealth Special Interest Group on "IoT for eHealth" and TCGCC Special Interest Group on "Pandemics", January 2022 [https://ieee-webinar.github.io/healthcare_iot/fourth_edn.html] (**Sudip Misra, Arijit Roy and Ayan Mondal**)
- Fifth webinar on Healthcare IoT, jointly conducted by IEEE ComSoc TC eHealth Special Interest Group on "IoT for eHealth" and TCGCC Special Interest Group on "Pandemics", January 2022 [https://ieee-webinar.github.io/healthcare_iot/] (**Sudip Misra, Arijit Roy and Ayan Mondal**)

SIG on NFV and SDN technologies

Head: Sudip Misra



Webinar on Next Generation IoT

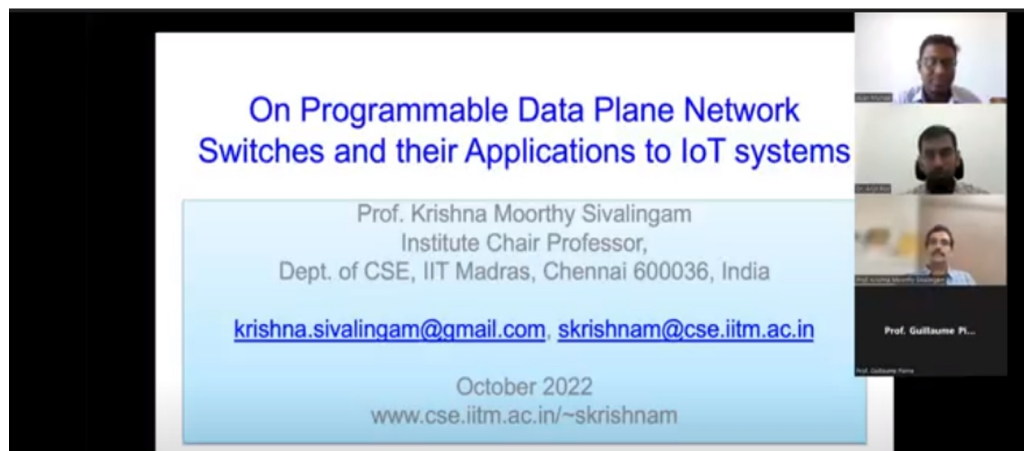
(Fourth Edition)



IEEE Communication Society
Technical Committee on Communications Software: Special Interest Group on "NFV and SDN Technologies"

Date: October 14, 2022

Time: 2:00 pm - 3:30 pm, Indian Time (IST)

A screenshot of a webinar interface. The main part of the image is a presentation slide with a light blue background. The slide title is "On Programmable Data Plane Network Switches and their Applications to IoT systems" in blue text. Below the title, the speaker's name and affiliation are listed: "Prof. Krishna Moorthy Sivalingam, Institute Chair Professor, Dept. of CSE, IIT Madras, Chennai 600036, India". Two email addresses are provided: krishna.sivalingam@gmail.com and skrishnam@cse.iitm.ac.in. At the bottom of the slide, the date "October 2022" and the website "www.cse.iitm.ac.in/~skrishnam" are shown. To the right of the slide is a vertical video feed showing three participants in a grid. The top participant is a man with glasses, the middle is a man with a beard, and the bottom is a man with a beard. Below the video feed, the name "Prof. Guillaume PL..." is visible.

SIG on Security

Head: Safa Otoum

- ▶ CANS-AI – Abu Dhabi
- ▶ CANS 2022- Abu Dhabi
- ▶ Abu Dhabi 6G Summit
- ▶ Secure Systems Research Center (SSRC)- Summit
 - (Securing Next-Generation Networks of the UAE and its allies against the ever-present cybersecurity threats using futuristic technologies and intelligent systems)
- ▶ Upcoming Conferences:
 - Co-chair in Communication and Information System Security IEEE GC2023

Communication and Information System Security

James Xiaojang Du, Stevens Institute of Technology, USA

Onur Günlü, University of Siegen and TU Berlin, Germany

Safa Otoum, Zayed University, UAE



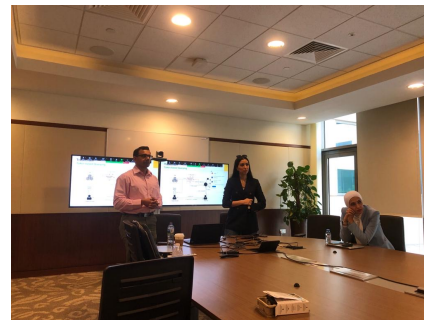
SIG on Security

Head: Safa Otoum

► Achievements:

- Best paper Award – IEEE MeditCom to Prof. Mohsen Guizani, *“Sine Cosine Algorithm for Reducing Communication Costs of Federated Learning”*.
- Best paper Award- Wireless World Research Forum (WWRF)! to Dr. Burak Kantarci, *“On the Impact of CDL and TDL Augmentation for RF Fingerprinting under Impaired Channels”*.

► **Keynote:** Zayed University, Prof. Salil Kanher: *“Transparent, Trustworthy and Privacy-Preserving Supply Chains”*, Oct. 2022.



SIG on Blockchains and Applications

Head: Moayad Aloqaity

► Short courses/Invited talks/Tutorials

- **AI for Leadership** Professional Training Program, “Blockchain in Energy sector: Nuclear Energy”
- **IEEE WMNC** tutorial, “Towards AI-Assisted Blockchain”
- **GITEX2022-Future Blockchain Summit 2022**, “Shaping the future of blockchain development in the UAE”
- **Abu Dhabi 6G Summit** Panel, “6G Network security : Challenges and Opportunities”

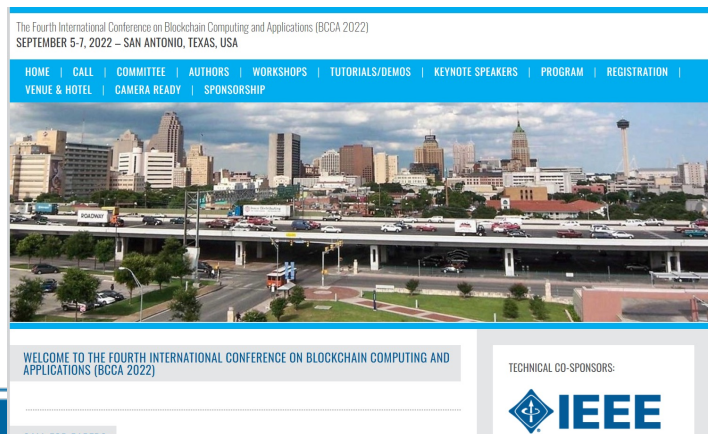


SIG on Blockchains and Applications

Head: Moayad Aloqaily

► Conferences

- **IEEE BCCA2022:** The Fourth International Conference on Blockchain Computing and Applications (BCCA 2022): San Antonio, Texas, USA Sept:05-07, 2022
- **IEEE BCCA2023:** Kuwait BC Summit in Kuwait – Sponsored by KCST.
- **IEEE ICBC2023:** IEEE International Conference on Blockchain and Cryptocurrency, Dubai, May 2023.



SIG on Big Data and Communication software

Head: Hassine Mougla

► Delivered organized talks and keynotes in 2022

- **Invited talk** at Huawei, France - on “Data management and Automimic network” , **Prof. Hassine Mougla**
- **Invited talk** at Institut Polytechnique de Paris, France- on “” ,**Prof. Hassine Mougla**
- **Keynote entitled** : Towards Connecting everything safely and securely using the DNS in junction with IEEE CAMAD 2022
Speaker: **Dr. Sandoche Balakrichenan** (AFNIC, France)
- **Keynote entitled** : Vision, use cases and the role of distributed large MIMO and reconfigurable intelligent surfaces in 6G in junction with IEEE CAMAD 2022
Speaker: **Prof. Tommy Svensson** (Chalmers University of Technology, Sweden)
- **Keynote entitled** : Beyond5G/6G R&D for Resilient Infrastructure in junction with IEEE CAMAD 2022
Speaker: **Prof. Akihiro Nakao** (University of Tokyo, Japan)
- **Keynote entitled** : Simulation of 5G/6G networks – selected issues in junction with IEEE CAMAD 2022
Speaker: **Dr. Slawomir Kuklinski** (Orange Poland, Poland)



► Guest course and on-Hands Workshop in Big Data

- In collaboration with the Data Intelligence Institute of Paris, we introduces a PhD course on Data Science taught by **Prof. Yvonne Becherini** : <https://u-paris.fr/diip/the-diip-introduces-a-phd-course-on-data-science-taught-by-yvonne-becherini/>
- Online Seminar and On-Hands Workshop entitled “Deep Domain Adaptation and Generalization” with **Dr. Shen Liang** (November 16th, 2022 - Zoom)

SIG on Big Data and Communication software

Head: Hassine Moun gla

► Guest editorships

- H. Moun gla appointed as a guest editor Elsevier Future Generation Computer Systems journal, Special Issue on “Information-Centric Network enabler Communication for Internet of Things and communication software ”.
- Special Issue on Internet of Things for Sustainable Society Development with Elsevier Sustainable Technology and Entrepreneurship journal; Deadline of submission: *1 December 2022 * (Dr B. Nour and all)
- Special Issue on IEEE Internet of Things Magazine - IEEE IoTM , Multi-Access Networking for Extended Reality and Metaverse *30 November 2022 * (Dr B. Brik and all)

► Upcoming

- Call for Interest, Special Issue organization on areas of joint interest between the Data and Communication software SIG (will be sent before the end of 2022).
 - IEEE Network letters
 - IEEE TNSM
 - Elsevier journal

SIG on Big Data and Communication software

Head: Hassine Moun gla

► Conferences and workshops

- IEEE CAMAD 2022 – Chairing & Organization
- IEEE GLOBECOM 2023 - Symposium Chair for CSSMA.
- Workshop around Big Data, AI, IoT, Vehicular Communications and Communication software in junction with the IEEE ICC 2023.

► Upcoming

- We invite active members in the SIG Big Data and Communication software to participate in the CommSoft TC Webinar Series
- Call for Interest, Track organization on areas of joint interest between the Data and Communication software SIG and endorsed conferences. (CFI).

SIG on Vehicular AdHoc Networks activities

Head: Hacene Fouchal

- ▶ The 6th International Workshop on Intelligent Transportation and Autonomous Vehicles Technologies- ITAVT 2023 (<https://icnetlab.org/ITAVT2023/>) within NOMS2023, 08-12 May 2023 // Miami, FL, USA (<https://noms2023.ieee-noms.org/>).
 - TPC co-chairs : Safa Otoum, Marwane Ayaida, Cherifa Boucetta
- ▶ The 9th International Conference on Vehicle Technology and Intelligent Transport Systems – VEHITS, (<https://vehits.scitevents.org/>) in Prague, Czech Republic, April 26-28, 2023
 - TPC chairs : Alexey Vinel, Jeroen Ploeg

SIG on Performances Evaluation

Head: Abdellatif Kobbane

- ▶ **Invited Keynote Speaker** : « Flexible resources allocation in future networks »

Workshop WCOS, University Ibn Tofail, Kenitra, June 20, 2022, Morocco

- ▶ **Invited Keynote Speaker** : « Resource Provisioning in dynamic SDN-based Radio Access Network Slicing for 5G Mobile Networks»

Workshop ESTC, University Hassan II of Casablanca, June 16, 2022, Morocco

- ▶ **General chair** of the 9th International Conference on Wireless Networks and Mobile Communications (WINCOM 2022) held in the Capital city of Morocco, Rabat.

SIG on Performances Evaluation

Head: Abdellatif Kobbane

- ▶ **Virtual Seminar:** Prof. Taskim Kavzoglu, Gebze Technical University, Turkey
Title: Extraction of Poplar Cultivated Fields from Very High Resolution Imagery Using OBIA, Feature Selection and Machine Learning Algorithms (WINCOM22, October 26, 2022)
- ▶ **Virtual Seminar:** Prof. Cheng Li, Memorial University, Canada
(Online) Title: Energy-Efficient Coordination Schemes for Underwater Acoustic Sensor Networks (WINCOM22, October 27, 2022)
- ▶ **Virtual Seminar:** Ibraheem Shaye, Istanbul Technical University, Turkey
Title: Mobility Management in the Future Ultra-Dense Heterogeneous Networks (5G and 6G Technologies) (WINCOM22, October 27, 2022)
- ▶ **Virtual Seminar:** Prof. Zouheir Rezki, University of California Santa Cruz, USA
Title: Optical Wireless Communications: Secrecy and Learning-Based Design. (WINCOM22, October 27, 2022)

SIG on Performances Evaluation

Head: Abdellatif Kobbane

► Industry session at WINCOM 2022, October 26, 2022

► Keynotes:

- Mrs. Samar Abou Ltaif, IoT Product Sales Specialist MEA, CISCO
- M. Mounir Soussi, Vice President Cloud & AI Africa at Huawei
- M. Hassan Ait El Madani, Partnerships & Development Director LEYTON Morocco

SIG on Performances Evaluation

Head: Abdellatif Kobbane

▶ Demo- Innovation projects (Competition) with WINCOM2022

Participation of 10 groups with 10 projects and prototypes, we gave two prizes for the winners

- ▶ Organization the 9th International Conference on Wireless Networks and Mobile Communications (WINCOM 2022) held in the Capital city of Morocco, Rabat.

October 26 – 29, 2022 with theme: smart connectivity

Statistics: 38 accepted papers

1 Best paper award

1 Best Student paper Award

2 Best Demo-IP

10 Demo-Innovation projects

4 Keynotes speakers

4 Industrial keynotes

1 special session

130 participants

SIG on Performances Evaluation

Head: Abdellatif Kobbane

► Significant publications:

- ✓ Ahajjam, M.A., Bonilla Licea, D., Ghogho, M., Kobbane, A.
 - Experimental investigation of variational mode decomposition and deep learning for short-term multi-horizon residential electric load forecasting Applied Energy journal, 2022, 326, 119963
- ✓ Gryech, I., Ghogho, M., Mahraoui, C., Kobbane, A.
 - An Exploration of Features Impacting Respiratory Diseases in Urban Areas, (2022) International Journal of Environmental Research and Public Health, 19 (5), art. no. 3095

eLetter – Fall 2022

Moayad Aloqaily and Aiman Erbad

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COMMUNICATIONS SOFTWARE

FALL 2022

COMMUNICATIONS SOFTWARE
TECHNICAL COMMITTEE

CommSoft TC

Co-EICs
Moayad Aloqaily
Aiman Erbad

Chair: Abdellatif Kobbane
Vice-Chair: Abd-Elhamid M. Taha
Secretary: Hassine MOUNGLA



<https://commsoft.committees.comsoc.org/>

Technical Achievement Award

Technical Achievement Award once or Two per year presented in each GC meeting

The award recognizes members of the IEEE Communications Society (ComSoc) who have made **significant contributions** to technological advancement of communications software networks.

► TC-COMMSOFT Award SubCommittee

- Cheng Li (past recipient)
- Jalel Ben-Othman (past recipient)
- Adlen Ksentini (past TC chair)

2022 CommSoft TC Technical Achievement Award

► **Criteria:**

- A person with a high degree contributions and accomplishments in the field of “communications software”

► **Award Frequency:**

- Annually presented during GC ComSoft TC meeting

► **Nomination:**

- Solicited from the Communications software members annually by the CommSoft TC
- Award Subcommittee
- Should include a mention for what contributions or accomplishment the person is nominated for and a supporting material
- Should include support letters

**IEEE COMMUNICATIONS SOCIETY
Communications Software Technical Committee
2022 TECHNICAL ACHIEVEMENT
AWARD**

PRESENTED TO

Hacène Fouchal

FOR CONTRIBUTIONS TO VEHICULAR COMMUNICATIONS AND THEIR SECURITY..]



Xuemin (Sherman) Shen, President, IEEE Communications



Wei Zhang, VP - Technical and Educational Activities, IEEE Communications

**IEEE COMMUNICATIONS SOCIETY
Communications Software Technical Committee
2022 TECHNICAL ACHIEVEMENT
AWARD**

PRESENTED TO

Shuai Han

FOR HIS ACHIEVEMENTS AND ORIGINAL TECHNICAL CONTRIBUTIONS TO WIRELESS
COMMUNICATIONS SECURITY AND THE INTEGRATED SATELLITE-TERRESTRIAL
COMMUNICATION NETWORKS



Xuemin (Sherman) Shen, President, IEEE Communications



Wei Zhang, VP - Technical and Educational Activities, IEEE Communications

TC Endorsed Conferences

- ▶ ICC'23, Rome (Nomination)
 - ▶ Ahmed Refaey for CSM symposium (confirmed)
- ▶ GC'23, (Nomination)
 - ▶ Hassine Moun gla for CSM symposium (confirmed)
 - ▶ Abdel-Hamid Taha for MWN symposium (confirmed)
- ▶ GC'24, (Nomination) ?

TC Endorsed Conferences

- ▶ CommSoft TC is seeking **highly motivated** candidates to be nominated as symposium chairs for CSM and NGNI
- ▶ The TC has one chair for CSM, and may nominate one chair for the NGNI symposium

TC Endorsed Conferences

- ▶ Communication Software, and Multimedia symposium (CSSMA), ICC 2023
 - **Submissions: 58**
- ▶ Communication Software, and Multimedia symposium (CSSMA), ICC 2022
 - **Submissions: 55**

Paper statistics for ICC 2023 – CSM

► Submission Status

Ahmed Refaey (TPC-Co-Chair)

Conference	Active (has manuscript)	Pending (no manuscript)	Withdrawn	Total under review, accepted and rejected	Total reviewed (incl. withdrawn)	Acceptance ratio (% including revisions)
IEEE ICC'23 - CSM Symposium 2023	57	1	13	58	58	0.0

Author Types



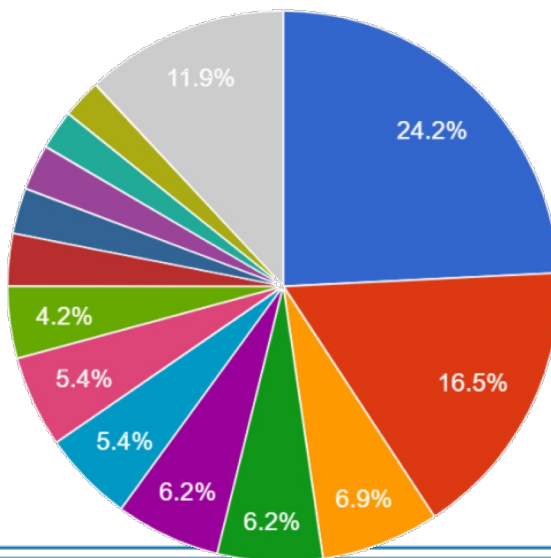
Author type	Active (has manuscript)
student	18
academia	31
industry	7
NGO	0
government	0

Paper statistics for ICC 2023 – CSM

► All Papers – Author Distribution

Author distribution by country

Region	Authors	%
Europe, Middle East, Africa	98	37.7
Asia/Pacific	97	37.3
Europe	78	30.0
Canada	43	16.5
Middle East and Africa	20	7.7
United States	18	6.9
Latin America	4	1.5
unknown	0	0.0



- China
- Canada
- USA
- Portugal
- India
- Italy
- France
- Qatar
- Spain
- Sweden
- Austria
- Greece

CSSMA Considerations

- ▶ Submissions trend GC 19 onward ...

CSSMA@?	ICC 17	GC 17	ICC 18	GC 18	ICC 19	GC 19	ICC 20	GC 20	ICC21	GC21	ICC 22	GC 22	ICC 23
Submissions	68	91	84	104	82	121	87	71	70	99	55		58

- ▶ We need to put more efforts to increase the submission number

Elections process

- ▶ The TC officers organized the election for the secretary position
- ▶ P&P rules: Secretary -> Vice-chair, Vice-chair -> Chair
- ▶ A nomination committee has been constituted:

Chair: Prof. Adlen Ksentini (former chair of the TC, EURECOM, Sophia Antipolis, France)

- Members: Prof. Cheng Li (Memorial University, Canada), Jalel Ben Othman (University Paris 13, France)
- ▶ The committee received three nominations (in order of receipt of applications):
 - **Moayad Aloqaily** (xAnalytics Inc) (Nominated by Prof. A. Shami Past chair)
 - **Sudip Misra** (IIT-Kharagpur), (Self nomination)
 - **Kapal Dev** (Munster Technological University Ireland) (Self nomination)
- ▶ Active members will receive an invitation to vote (list available on TC website)
- ▶ Voting will take place online by email to the Elections Committee between December 15 at 9h00 AM and December 16 before midnight (New York time 2022). [Observer : Pr. Shiwen Mao](#)
- ▶ Results will be announced on december 17th, if second round a new announcement will be sent
- ▶ The results will be sent for validation after the vote to IEEE ComSoc.

Qualifications and Position Statement

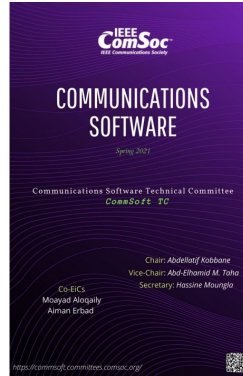
Moayad Aloqaily

- ▶ Ph.D. from University of Ottawa, Canada
- ▶ SMIEEE, P.Eng., MACM
- ▶ SYSC Department, Carleton University, Canada
- ▶ Director of Cybersecurity program, Al Ain University, UAE.
- ▶ R&D Manager, MBZUAI, UAE
- ▶ Project Manager, CyberAI, TII-MBZUAI, UAE.
- ▶ Best Paper Award: IEEE MeditCom. IEEE IWCMC, IEEE GC23, Ad Hoc Networks, IEEE Computer (Top-Runner).
- ▶ IEEE UAE Computer Society Chair
- ▶ IEEE UAE Young professional Chair
- ▶ Invited Speaker: GITEX2022, WMNC2022, 6G Summit, IWCMC2022
- ▶ Area Editor: IEEE Network, IEEE WCM, IEEE NETLET, Ad Hoc, SIMPAT, JONS, Cluster Computing
- ▶ Established the *ArtificialLeap* and *icNet* Laboratory
- ▶ PI and Co-PI of several national and international grants

Qualifications and Position Statement

Moayad Aloqaily

► eLetter Co-EiC



- SIGs Bblockchains and Applications
 - Invited Keynoters, Special Issues, Best reader, Reports on activities (past and future events)
- Active member
- Continuously contributing to the visibility of the TC
- Closely working with other TC: IoTSN, TI, WTC

Sudip Misra



- **Fellow of IEEE**, FNAE, FNASc, FIET, FBCS, FRSPH, FIETE, ACM DM
- Full Professor, Department of Computer Science and Engg, IIT Kharagpur, India
- **IEEE ComSoc Distinguished Lecturer** (2020-2021)
- 475 publications (incl. 312 journal papers, 7 fully authored books, 15 filed patents)
- **h-Index: 55 Citation: 14388** (as on 28 November, 2022)
- Won 13 research paper awards, two of which are single-authored.
- Multiple academic awards - national and international (ComSoc AP Award, IEEE TCSC Mid-Career Award, etc.)
- Editor/Associate Editor of many IEEE Transactions/Journals (TMC, TVT, TNSE, etc.)
- ComSoc activities - talks, conference organization, special issue editorship etc
- General Chair, Program Chair, Publications Chair, Publicity Chair, and Session Chair in many conferences.
- **Coordinator - TC CommSoft SIG on “NFV and SDN Technologies”**
- **Areas of experience:** IoT, WSN, Ad-Hoc networks, SDN/NFV, 5G/6G, Cloud and Fog, eHealth, Blockchain, AI and ML applications
- **Webpage:** <https://cse.iitkgp.ac.in/~smisra/>
- **Link to Short Bio:**
https://docs.google.com/document/d/1Zml55BvCyZFLrsTol5xvnxeadZ7znjtllc9Um9to_Qk/edit?usp=sharing

Position Statement

- If selected as Secretary for TC-CommSoft, I will
 - Carry forward the objectives and principles of the TC with full thrust.
 - Engage with all stakeholders more and bring into the confidence of all.
 - Be more inclusive. Will support all the interested members to pitch new ideas.
 - Search for more avenues to expand the interests of the TC
 - Stronger liaison with ComSoc BoG and other TCs.
 - Work towards better outreach and visibility of our TC
 - Propose the formation of new SIGs as per new exciting avenues
 - Bring in cross-discipline expertise for improving Communication Principles
Example: Biological networks, nano networks
 - Propose to engage our TC into more conference organizations and workshops

Communications Software Technical Committee



Communications Software Technical Committee- Secretary Position

Kapal Dev

Assistant Lecturer,
Munster Technological University, Ireland.

Kapal.dev@ieee.org

Applicant Biography

- Senior Researcher, Research Fellow (MTU, TCD) (Both Industry Funded Projects)
- 5G Consultant and Engineer at Altran Italia
- PhD in Information Technology from PoliMi, Italy Funded under Prestigious Erasmus Mundus Fellowship
- Projects as PI (Horizon Europe MSCA Staff Exchange, Erasmus + ICM and CBHE, H2020 CO-FUND, MSCA IF, ESAA)
- Funded Investigator (FI) CONNECT Centre
- Expert Evaluator (ERC Starting Grants, MSCA CO-FUND, ESAA)
- Critical Reviewer [Top IEEE Journals, Flagship IEEE Conferences, Book proposals]
- Leadership and Management [Head of Projects-OCEANS Networks, Associate Editor, Guest Editor, Main Track Chair, Lead Workshop Chair, Funded Projects, TPC member]
- IEEE ComSoc Standardization: Submitted internet draft on Operations and Control Networks (OCN) Use Cases for Industry control Networks in Internet Engineering Task Force-A Standardization Organization.
- Special Interest Group (SIG) Chair of "Industrial Communication Networks" under IEEE ComSoc technical committee "Communications Systems Integration and Modeling".

Vision for TC

- Increase membership (Representation from All regions)
- More Industry Members (Sharing in Flagship Conferences)
- More Female Members (Webinars, WICE)
- Projects Collaborations (Experts from Worldwide, Sharing Calls)
- Encouraging members for more SIGs (More Dissemination with its Benefits)
- Collaborating with sister societies
- More opportunities for members to participate in Flagship Conferences
- Helping young members (ChangeMakers)
- Increase Dissemination of TC and its activities

Commitment-TC

Time to create a Balanced team (Highly Experienced Researchers and Young Researchers (PhD<5years))

I commit to work for this TC with honesty and decent time commitment if given a chance.

Please vote for me if you think my vision statement is well aligned with your thoughts!

TC Restructure (update & draft)

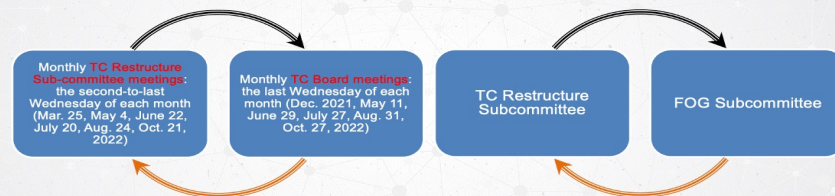
Why Should We Restructure the TCs?

-  Lack of industry participation
-  Lack of diversity in YP & Students members
-  Lack of coordination to form SIGs
-  Lack of support for local chapters globally
-  Lack of support for standard development
-  Lack of educational services to members
-  Lack of guidelines in creating TC awards
-  Significant overlapping areas among some TCs

What we've done in 2022?

Iterative Procedure

- ▶ Iterative procedure to involve TCs/ICs in the process:



All meeting docs and slides are available at:
<https://tc.boards.comsoc.org/meeting-documents/>

Your feedback is very important to us!

Please send your comments to
Shiwen Mao, TC Board Director, E-mail: smao@ieee.org
Wei Zhang, VP TEA, E-mail: weizhang@ieee.org

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IEEE Communications Society



Miscellanies

**Thank you for your presence and Good luck
for the new officers
(Pending election an approval) (2023 – 2024)**
Chair: Abdelhamid Taha
Vice-chair: Hassine MOUNGLA
Secretary: ?