Social Networks TC Meeting IEEE ICC 2023

Date: April 17, 2023 Time: 11:00 am – 12:00 pm EST

Reminder to Register

- The IEEE ComSoc Technical Committee on Social Networks
- Reminder to write your information in chat:

✓ your name + affiliation + email

Social Networks TC Meeting Agenda

- Welcome and Introductions
- Scope of TCSN
- Approval of the GC 2022 minutes
- TCSN members, activities, and status
- Newsletter & Journal activities
- Volunteers for the SAC tracks in GCs and ICCs
- Special interest groups (SIGs) updates
- Award Policy
- 2023 ComSoc TC Innovation Support
- 2023 ComSoc TC Campaign Video Project
- Adjourn

Technical Committee on Social Networks (TCSN)

- TCSN serves as a forum for researchers and technologists to discuss the state-of-the-art, present their contributions, and foster the development of new emerging topical areas in social networks
- TCSN serves as ComSoc's focal point in the areas of social network, supporting IEEE ComSoc's activities (e.g., ComSoc's journals, magazines, conferences, IEEE standard activities, and the recognition and proposal of candidates) and organizing symposia, workshops, sessions and tutorials at ComSoc conferences
- Nominating suitable candidates for ComSoc and IEEE awards, proposing distinguished lecturer candidates, endorsing deserving candidates for the election to IEEE Senior Member and Fellow grade

TCSN Scope

- Formation and evolution of human social networks
- Information propagation and dissemination in human social networks
- Small world phenomenon and its implication in telecommunication networks
- Convergence of telecommunication networks and human social networks
- Social-aware network solutions in wireless and wireline communications systems
- Cross-layer design for social networks and the underlying communications platforms
- Al for communications and networking
- Optimization and protocol design for mobile social networks
- Network graph modeling, measurements, simulations, and experiments
- Analysis of dynamics and trends in the evolutions of social networks
- Analysis and control of belief, influence, and rumor propagations in social environments
- Analysis of social media, trust, and reputation
- Privacy and security in social network
- Social signal processing
- Data mining, machine learning, information retrieval, and artificial intelligence in social contexts
- Infrastructure, platform, protocol design, and optimization for mobile social clouds and social internet-of-things
- Innovative applications in social networks and services for mobile internet, multimedia networks, mobile e-commerce, and cyber-physical systems
- Multidisciplinary and interdisciplinary research on social networks
- New applications and services

Approval of the IEEE GC 2022 minutes

- IEEE ComSoc Social Networks Technical Committee <u>https://sn.committees.comsoc.org</u>
- Approval of GC 2022 meeting minutes <u>http://site.ieee.org/comsoc-</u> <u>sn/files/2023/04/TCSN_MeetingMinutes_GC22.pdf</u>
- Motion: Eirini Eleni Tsiropoulou
 - Second: Neeli Prasad
 - Voting: All in favor

TCSN Members

- Any IEEE ComSoc member, who has been active in the TC activities for the past three years, can be a member of the TCSN. Also, it is necessary to subscribe to the TCSN mailing list
- A TC member shall attend (physically present or by teleconference) three or more of the prior six regular scheduled TC meetings for the past three years, cast informed votes on TC business, and be encouraged to assist in the conduct of TC business
- Individuals who are not ComSoc members may participate in TC activities as collaborators

Invited Talks, Panels, Recognitions, etc.

Prof. Damla Turgut, University of Central Florida [*renewed DL appointment*]

- IEEE Distinguished Lecture "Communication, computation, and privacy trade-off in machine learning for smart environments," hosted by IEEE Benelux Chapter, April 6, 2023
- IEEE Distinguished Lecture "When homes are too smart for their own good: physical and computational modeling of smart homes," hosted by IEEE Student Branch & IEEE AP/COM/MTT Student Chapter at KU Leuven, April 4, 2023
- Invited talk "Communication, computation, and privacy trade-off in machine learning for smart environments," at UC Louvain, April 7, 2023 [in-person]
- Keynote talk "Growing the Community in Tech ", NCWIT Aspirations in Computing Award Ceremony, April 15, 2023
- Panelist at N2Women event at IEEE PerCom'23, March 14, 2023
- Mentor at Joint WICE/YP Mentoring event at IEEE GC'22, December 5, 2022
- Invited talk "Increasing the participation of women and minorities in STEM at a large metropolitan university," at Women in Communications Engineering (WICE) Workshop in IEEE Latin-American Conference on Communications, November 30, 2022

TCSN Status

- Mail list
 - Currently: 1206 members subscribed through mailing list
- Website:
 - https://listserv.ieee.org/cgi-bin/wa?SUBED1=IEEESTC&A=1
- Interaction with members by means of:
 - Mailing list IEEESTC@LISTSERV.IEEE.ORG
- To subscribe
 - <u>https://listserv.ieee.org/cgi-bin/wa?SUBED1=IEEESTC&A=1</u>
- Social media





- Special Issues
 - IEEE Networking Letters
 - ✓ Special Issue on Networking Enablers for 6G Use Cases
 - ✓ Topic of interest: Bridging agility, flexibility, and personalized user experience
 - ✓ Guest Editors: Burak Kantarci (Lead), Paolo Monti, Raouf Boutaba
 - ✓ Submission Deadline: December 15 2022
 - ✓ Publication Date: 2nd Quarter 2023
 - IEEE Transactions on Network Science and Engineering
 - ✓ Next-generation Traffic Measurement with Network-wide Perspective and Artificial Intelligence
 - Topic of interest: Network-wide and/or AI-powered traffic measurement for online social networks
 - ✓ Guest editors: He Huang (Lead), Haipeng Dai, Shigang Chen, Amirhosein Taherkordi, Ran Ben Basat, Jun (Jim) Xu
 - ✓ Submission Deadline: 15 January 2023
 - ✓ Revised Manuscripts Due: 1 June 2023
 - ✓ Publication Date: First Quarter 2024

- Special Issues
 - IEEE Communications Magazine
 - ✓ Affective Computing and Communications Research, Technologies, Management, and Applications
 - ✓ Topic of interest: Application of emotion sensing in communications, including emotions in **social** networks communications
 - ✓ Guest editors: Abd-Elhamid M. Taha, Ajjen Joshi, M. Fatima Domingues, Mehmet Ulema
 - ✓ Submission Deadline: 1 December 2022
 - ✓ Final Accepted Manuscript Due: 15 April 2023
 - ✓ Publication Date: June 2023
 - IEEE Internet of Things Magazine
 - ✓ Data Science Driven Intelligent IoT
 - ✓ Topic of interest: Application of intelligent IoT to social IoT
 - ✓ Guest Editors: Pin-Han Ho (Lead), Shih Yu Chang, James She, Yuren You, Min Chen, János Tapolcai
 - ✓ Submission Deadline: December 31 2022
 - ✓ Final Manuscript Due: 15 March 2023
 - ✓ Expected Publication Date: June 2023

- Special Issues
 - IEEE Communications Magazine
 - ✓ Social-aware Communication Networks and Systems and Innovative Social Network Applications and Services
 - Topic of interest: Graph modeling, learning/prediction, social network evolution with application in social-aware networks / systems and advanced applications; simulations, experiments
 - ✓ Guest editors: Malamati Louta (Lead Guest Editor), Chiara Boldrini, Francesco Bonchi, Symeon Papavassiliou
 - ✓ Submission Deadline: **30 April 2023**
 - ✓ Publication Date: Fourth Quarter 2023
 - IEEE Network
 - ✓ Networking Challenges and Opportunities for Multi-user XR and the Metaverse
 - ✓ Topic of interest: Machine learning, data science, and blockchains for multiuser XR and the Metaverse
 - ✓ Guest editors: Bo Han (Lead), Tristan Braud, Mario Di Francesco, Maria Gorlatova, Luyang Liu, Gábor Sörös, Pengyuan Zhou
 - ✓ Submission Deadline: 22 December 2022
 - ✓ Final Manuscript Due: 10 April 2023
 - ✓ Publication Date: May/June 2023

- Special Issues
 - IEEE Communications Magazine
 - ✓ Metaverse
 - ✓ Topic of interest: Sustainability, Social Good
 - ✓ Guest editors: Mischa Dohler, Mar Gonzalez Franco, Young-Gab Kim, Timoni West
 - ✓ Submission Deadline: 1 October 2022
 - ✓ Final Accepted Manuscript Due: 28 February 2023
 - ✓ Publication: May 2023

Newsletters

- Newsletters
 - Twice a year (ICC and Globecom)
- Editors:
 - Issue no. 1: Damla Turgut
 - Issue no. 2: Neeli Prasad
 - Issue no. 3: De-Nian and Damla
 - Issue no. 4: Valeria Loscri and Anna Maria Vegni
 - Issue no. 5: De-Nian, Neeli, and Damla
 - Issue no. 6: De-Nian, Neeli, and Damla
 - Issue no. 7: De-Nian, Neeli, and Damla
 - Issue no. 8: Anna Maria Vegni
 - Issue no. 9: Anna Maria Vegni
 - Issue no. 10: De-Nian, Damla, and Burak
 - Issue no. 11: Claudio Marche

Volunteers for Future Conferences

- ICC/GLOBECOM
 - ICC 2023 Rome, Italy
 - ✓ Rep: De-Nian Yang
 - GC 2023 Kaula Lumpur, Malaysia
 - ✓ Rep: Burak Kantarci
 - ICC 2024 Denver, USA
 - ✓ Rep: Eirini Eleni Tsiropoulou
 - GC 2024 Cape Town, South Africa
 ✓ Rep: Anna Maria Vegni
 - ICC 2025, Montreal, Canada
 - ✓ Rep: Valeria Loscri
 - GC 2025, Taipei, Taiwan
 - ✓ Rep: TBD
 - ICC 2026, Glasgow, Scotland
 - ✓ Rep: TBD
 - GC 2026, Macao
 - ✓ Rep: TBD

GC'23 deadline extended to May 6, 2023!

TCSN Volunteers Needed

- Information Officers: (volunteers needed and please contact <u>Damla.Turgut@ucf.edu</u> with subject IEEE ComSoc TCSN volunteers)
 - Web: De-Nian Yang (Academia Sinica)
 - Newsletters: Claudio Marche [Twice a year at ICC and Globecom]
 - Membership development: Eirini & Burak
 - \checkmark Will continue to work on increasing the membership
 - ✓ We have 1206 members
 - Awards Committee
 - $\checkmark~$ We are close to finalizing our draft
 - Industry liaison: Charalampos Patrikakis
 - ✓ Industry and other related projects
 - Liaison to ComSoc Standardization Board: Charalampos Patrikakis
 - Liaisons to TCBD: Shui Yu (University of Sydney)
 - Marketing: Neeli Prasad and De-Nian Yang

Special Interest Groups

- Call for Interest in SIG creation
 - If interested to create other relevant SIG, please contact the TCSN Officers
 - ✓ Scope
 - ✓ Activities
 - ✓ Liaison with other TCs
 - TCSN support on SIG activities
 - ✓ Technically (co-)sponsor workshops and conferences
 - ✓ Promote seminars/talks
 - ✓ Organize special issues in journals

Special Interest Groups

- Call for Interest in Liaison with other TC
 - If interested to serve as liaison with other TCs or other ETIs, please contact the TCSN Officers
 - Objective of liaison
 - ✓ Promote joint activities of interest
 - ✓ Coordinate initiatives (special issues/tracks in conferences/ workshops)
 - ✓ Organize special issue in journals

https://www.comsoc.org/about/committees/technical-committees

SIOA SIG: Social Internet of Anything

SIG Officers

- Chair: Anna Maria Vegni, Roma Tre University, Italy
- Co-Chair: Valeria Loscrì, INRIA Lille, France
- Senior Advisor: A. Benslimane, University of Avignon, France

SIG Scope – *short description*

The Social Internet of Anything Special Interest Group (SIOA SIG) of the IEEE Technical on Social Networks (SN) promotes research and development in emerging area of social networking applied to communication networks, ranging from traditional IoT networks, including Internet of Vehicles, Internet of Flying devices, Internet of Medical devices, till Internet of People, where social features are relevant and exploitable for communication and networking purposes.

SIOA SIG: Social Internet of Anything

SIG Topics

The main technical topics of SIoA are the following, but not limited to:

- Social network analysis applied to communication networks
- Security and privacy issues in Social Internet of Anythings
- Connectivity management ruled by social features
- Machine learning for Big Data analytics in social Internet of Anythings
- Integration of social aspects in traditional ad-hoc networks
- Small-world theory applied to Social Internet of Anythings
- Cross-layer design of communication networks and social networks
- Epidemic social network analysis for pandemic contension
- Social networking for contact tracing, location and tracking
- Social Data and multimedia communication and privacy

SloA SIG: Invited Seminars

Till now, we had 4 invited seminars from relevant speakers in the topic of social networks.

If you are interested in deliverying an invited speaker, or you know someone valuable, please feel free to let us know!



Adding social capability to Digital Twins in 5G IoT ecosystems

> Prof. Antonio Iera, University of Calabria, Italy 25 February 2022, 4 PM CET



TALK TITLE:

Towards the network of the future... with a little help from my friends

Prof. Giacomo Morabito, University of Catania, Italy 29 April 2022, 4 PM CET

0

TALK TITLE:

Modelling Bias and Measuring Polarization in Social Networks

Dr. Frank Valencia, CNRS LIX, École Polytechnique de Paris & Pontificia Universidad Javeriana de Cali, France



TALK TITLE:

Trustworthy cooperation among socially enhanced digital twins

Dr. Michele Nitti, University of Cagliari, Italy Registration info at <u>https://forms.gle/SW6scC3cBvgn6bAQ6</u>

TC Social Networks

2nd Intl. Workshop on Social Internet of Anything

The 2nd workshop will be organized jointly with WiMob 2023, which will be held in Montreal, Canada during 21-23 June 2023

Submission deadline: 24 April, 2023



ToSN SIG: Special Interest Group on TRUSTWORTHINESS ON SOCIAL NETWORKS

SIG Officers

- Chair: Charalampos Z. Patrikakis, University of West Attica, Greece
- Co-Chair: Agata Gurzawska, Trilateral Research, Ireland
- Senior Advisor: Sorin Adam Matei, PURDUE University, USA

SIG Scope – short description

The Trustworthiness on Social Networks interest group will foster trust-focused research on social networks. It will identify the trust vulnerabilities and opportunities in existing and future social networking technologies. It will also examine the design and usage factors that influence societal perceptions of trustworthiness of social networking platforms and of their business models. Particular attention will be paid to regulation, including both specific measures to foster trustworthiness and guardrails to prevent unjustified controls of social media in the name of trustworthiness.

The group will propose and evaluate tools and methods for enhancing trust in social networks. Finally, it will expand on the results of research projects such as HORIZON 2020 EUNOMIA, HORIZON EUROPE project VERITY and Trust First.

ToSN SIG: Special Interest Group on TRUSTWORTHINESS ON SOCIAL NETWORKS

SIG Topics

The main technical topics of ToSN are the following, but not limited to:

- Co-creation of technical and regulatory frameworks for generating trustworthiness in collaboration with commercial, regulatory, funding, and educational institutions
- Evaluation of strategies and tools for increasing trust in social networks
- Social Network Analysis to identify variables that affect public's trust
- Creation of expert clusters that can contribute to the extraction and dissemination of findings
- Investigation of AI algorithms that are focused on trustworthiness in social networks
- Research on specific scientific topics, such as pandemic and environmental issues

Award Policy

- Categories
 - Technical Achievement Award, Outstanding Service Award
- Award Subcommittee
 - Chair and members: appointed by TC Chair
 - ✓ At least 3 and at most 6 committee members
 - Term limit: 2 years (with at most one additional 2-year term)
- Eligibility
 - IEEE ComSoc (any of ComSoc's sister societies) members, except
 TC Chair
- Nominations
 - Solicited by Award Subcommittee Chair
 - ✓ At TC meetings or via TC mailing list

Award Policy

- Selection Process
 - Final decision: made by Award Subcommittee, approved by TC Chair
 - Selection criteria: established by Award Subcommittee
 - Reviews, voting, and deliberations are confidential
- Reporting of Awards
 - Award Selection Report
 - ✓ Prepared by Award Subcommittee Chair
 - ✓ Sent by TC Chair (within 2 weeks of selection)
 - ✓ Approved by TC Director (with in 2 weeks of receipt)
- Policies that follow IEEE ComSoc P&P
 - Creation and scope of awards
 - Conflicts of interest
 - Submission deadline of Award Selection Report

2023 ComSoc TC Innovation Support

Purpose:

To incubate, nourish, and grow breakthrough innovations in communications technologies, this project aims to offer incentive fund to Technical Committees (TC), Special Interest Group (SIG), and Emerging Technologies Initiatives (ETI) to provide original and revolutionary ideas, concepts, techniques, methods and solutions that may lead to the breakthrough in communications technologies.

How:

- \$50,000 has been approved by the BoG
- A subcommittee will be appointed by VP TEA consisting of BoG & FinCom members, current or past TC Chairs
- Up to 10 proposals will be selected from TC/SIG/ETI submitted proposals, and each selected proposal will be funded by \$5,000
- Supported expenses include travel, support for organizing workshop, seminar, etc.
- A proposal template will be available soon

2023 ComSoc TC Innovation Support

Selection Criteria:

- Technical challenge and breakthrough innovations your TC/SIG/ETC will address and provide
- Related contributions and activities which your TC/SIG/ETI has already made and organized
- Future plan and potential impact (e.g., technological impact and membership diversity)
- Incubate and nourish the new and emerging technology
- Help to recruit more members

Timeline:

- 15 May 2023: Deadline of proposal submission
- 16 May 30 June 2023: Review and Selection Process
- 1 July 2023: Notification of selection results

2023 ComSoc TC Campaign Video Project

VP TEA proposes the development of TC Campaign video

- Purpose: to make our members and the public aware of what our technical committees are doing and how they guide the high-interest initiatives in communication technology
- How: will make one short video about 1-2 minutes for each TC.
 Finally, 3 or 5 best videos will be selected among 26 TCs for the TC Video Award
 - Will work with ieee.tv and IEEE Media Center
 - Introduction of your TC, interviews with TC members, new technologies, classic papers,...
- **Budget:** The estimated budget is \$30,000, about \$1,000 per TC

2023 ComSoc TC Campaign Video Project

VP TEA proposes the development of TC Campaign video

- Goals:

- Provide an enhanced experience and membership recruitment and retention opportunities
- Increased member recruitment and engagement
- Promoting your TC and your TC's research and innovations

- Timeline:

- 17 Feb. 2023: Announce the TC Campaign Video Project
- 15 May 2023: Submission of TC video ideas/proposals
- 1 June 1 Oct. 2023: Making the TC videos

TCSN Officers

- Chair: Damla Turgut, <u>Damla.Turgut@ucf.edu</u>
- Vice-Chair: De-Nian Yang, <u>dnyang@iis.sinica.edu.tw</u>
- Secretary: Burak Kantarci, <u>burak.kantarci@uottawa.ca</u>

Next Meeting

Next TCSN meeting at GC'23, Malaysia.
 See you then!



IEEE Global Communications Conference 4-8 December 2023 // Kuala Lumpur, Malaysia





Reminder to Register

- The IEEE ComSoc Technical Committee on Social Networks
- Reminder to write your information in chat:

✓ your name + affiliation + email

Voting:

ADJOURN & THANK YOUR ATTENDANCE

Thanks for attending and see you in next TCSN meeting at GC 2023!

Motion: Second: