

Social Networks TC Meeting

IEEE GC 2022

Date: November 21, 2022

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 ICC 2022 minutes
- TCSN members and activities
- TCSN status
- Newsletter & Journal activities
- Volunteers for the SAC tracks in GCs and ICCs
- TC Restructure
- Special interest groups (SIGs) updates
- Standardization updates
- 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
- AI 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 ICC 2022 minutes

- IEEE ComSoc Social Networks Technical Committee
<https://sn.committees.comsoc.org>
- Approval of ICC 2022 meeting minutes
- http://site.ieee.org/comsoc-sn/files/2022/11/TCSN_MeetingMinutes_ICC22.pdf
- Motion: Burak Kantarci (University of Ottawa, Canada)
 - Second: Eirini Eleni Tsiropoulou (University of New Mexico, USA)
 - 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

- IEEE Virtual Distinguished Lecture “Communication, computation, and privacy trade-off in machine learning for smart environments,” hosted by IEEE Egypt Section, September 15, 2022
- Keynote address “When homes are too smart for their own good: physical and computational modeling of smart homes,” at The 25th International Symposium on Wireless Personal Multimedia Communications (WPMC'22), November 2, 2022
- (Upcoming) 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
- (Upcoming) Mentor at Joint WICE/YP Mentoring event at IEEE GC'22, December 5, 2022

Prof. De-Nian Yang, Academia Sinica, Taiwan

- IEEE TPDS Award for Editorial Excellence, USA (2022)

Prof. Burak Kantarci, University of Ottawa, Canada

- (Upcoming) Speaker: “ML/DL-Backed Security and Safety of Cyber-Physical Systems and 5G-Enabled Critical Infrastructures”, BSides Ottawa, Nov.2022, Kanata, Ontario, Canada
- (Upcoming) Panelist: “AI/Machine Learning-Enabled (CAV) in the Era of 5G, 6G, and Beyond” in conjunction with IEEE International Conference on Advanced Networks and Telecommunications Systems (ANTS), Gandhinagar, Gujarat, India, Dec. 2022
- Invited Speaker: “RF Fingerprinting under Impaired Channels,” Wireless World Research Forum-Connected Vehicles Workgroup, Abu Dhabi, UAE., Nov 2022
- Invited Speaker: “AI-enabled Autonomous Vehicles-Driven Services for Secure, Sustainable and Healthy Communities,” Impact of 5G and Beyond on Connected and Autonomous Vehicles Workshop-World Wireless Research Forum, Ottawa, ON, May 2022

TCSN Status

- Mail list
 - Currently: 1205 members subscribed through mailing list
- Website:
 - <https://listserv.ieee.org/cgi-bin/wa?SUBED1=IEEEESTC&A=1>
- Interaction with members by means of:
 - Mailing list IEEEESTC@LISTSERV.IEEE.ORG
- To subscribe
 - <https://listserv.ieee.org/cgi-bin/wa?SUBED1=IEEEESTC&A=1>
- Social media



@IEEEComSoc_TCSN



IEEE ComSoc Social Networks
Technical Committee



IEEE ComSoc Social Networks
Technical Committee

Journal Activities

- Special Issues
 - IEEE Trans. on Green Communications and Networking (2021)
 - ✓ Collaborative Intelligence for Green Internet of Things in the 6G Era
 - ✓ Topic of interest: Collaborative Green IoT technologies for 6G services
 - ✓ Guest editors: Celimuge Wu, Kok-Lim Alvin Yau, Zonghua Zhang, Damla Turgut, Shiwen Mao
 - ✓ Publication: December 2022
 - 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

Journal Activities

- Special Issues
 - 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
 - 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

Journal Activities

- 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
 - IEEE Communications Magazine
 - ✓ The Evolution of Telecom Business, Economy, Policies and Regulations
 - ✓ Topic of interest: The telecommunication industry's evolution in terms of future technologies and **social** environment
 - ✓ Guest Editors: Hashem Sherif, Eva Ibarrola, Kai Jakobs, Duncan Sparrell
 - ✓ Submission Deadline: 1 October 2022
 - ✓ Final Accepted Manuscript Due: 1 January 2023
 - ✓ Publication Date: March 2023

Journal Activities

- Special Issues
 - IEEE Transactions on Network and Service Management
 - ✓ Machine Learning and Artificial Intelligence for Managing Networks, Systems, and Services
 - ✓ Topic of interest: Application Domains and Management Paradigms: **Social** and communication networks analysis
 - ✓ Guest Editors: Nur Zincir-Heywood (Lead), Robert Birke, Elias Bou-Harb, Giuliano Casale, Takeru Inoue, Neeraj Kumar, Hanan Lutfiyya, Deepak Puthal, Farhana Zulkernine
 - ✓ Submission Deadline: 30 April 2022
 - ✓ Publication Date: December 2022

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

Volunteers for Future Conferences

- ICC/GLOBECOM
 - ICC 2022 Seoul, South Korea
 - ✓ Rep: Abderrahim Benslimane
 - GC 2022 Rio de Janeiro, Brazil
 - ✓ Rep: Neeli Prasad
 - 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 Tapie, Taiwan
 - ✓ Rep: TBD

TCSN Volunteers Needed

- Information Officers: (volunteers needed and please contact Damla.Turgut@ucf.edu with subject IEEE ComSoc TCSN volunteers)
 - Web: De-Nian Yang (Academia Sinica)
 - Newsletters: ??? [Twice a year at ICC and Globecom]
 - Membership development: Eirini & Burak
 - ✓ Will continue to work on increasing the membership
 - ✓ We have 1205 members
 - Awards Committee
 - ✓ We are currently working on this – updating P&Ps
 - ✓ We need to keep diversity in mind
 - Industry liaison: Charalampos Patrikakis
 - ✓ Industry and other related projects
 - Liaison to ComSoc Standardization Board: Charalampos Patrikakis
 - Liaisons to TCBD: ???
 - Marketing: Neeli Prasad and De-Nian Yang

TC Restructure

TC Restructure (update & draft)

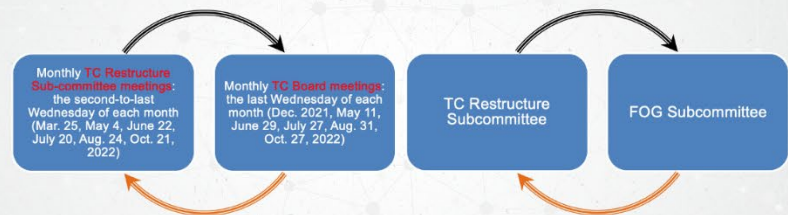
Why Should We Restructure the TCs?

-  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

IEEE
ComSoc

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>

SloA 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 (SloA 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.

SloA SIG: Social Internet of Anything

SIG Topics

The main technical topics of SloA 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 3 invited seminars from relevant speakers in the topic of social networks.

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



TALK TITLE:

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



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

1st Intl. Workshop on Social Internet of Anything

- This workshop took place at Thessaloniki, Greece, on October 10, 2022, collocated with the 18th Intl. Conf. on Wireless and Mobile Computing, Networking and Communications (WiMob 2022).
 - WiMob 2022 is sponsored by IEEE and endorsed by IEEE ComSoc.
- **Organizers:** Valeria Loscrì (INRIA, France), Anna Maria Vegni (Roma TRE, Italy), De-Nian Yang (Academia Sinica, Taiwan)



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.
- We look for volunteers for the organization of the workshop!



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standardisation



Charalampos (Babis) Z. Patrikakis
Director CoNSeRT lab
University of West Attica



.. In the LAST episode



This project has received funding from the European Union's H2020 research and innovation programme under the grant agreement No 825171

EUNOMIA

ASSESS • TRUST • SHARE

Eunomia (Greek: Εὐνομία) was a minor Greek goddess of law and legislation (her name can be translated as "good order", "governance according to good laws"), as well as the spring-time goddess of green pastures

Nine Directives on Information Hygiene

- Information Hygiene:
careful evaluation of the information that one is consuming and disseminating

Information hygiene: Prioritising practical and reliable recommendations for non-expert social media users

George Loukas ^a, Xing Liang ^a, Ryan Heartfield ^a, Diotima Bertel ^b, Pinelopi Troullinou ^c

Corresponding author: George Loukas (g.loukas@gre.ac.uk)*

^a University of Greenwich, United Kingdom

^b SYNIO GmbH, Austria

^c Trilateral Research, Ireland

Guideline	Population	Intervention
GS1: Check whether the author is anonymous	H	H
GS2: Check who the author is (of post content)	M	M
GS3: Be wary of unusual top-level domain names, like “.com.co.”	M	H
GS4: Have you heard of the outlet that published the story?	H	H
GS5: Check the social media account sharing the information and when it was created	M	M
GS6: Check whether the social media account or website linked is possible to be a pretend one, for example by imitating the logo?	L	L
GS7: Does the social media account post at all times during the day and night like a bot would?	H	L
GS8: Does the author use reliable sources (for example, well-established and respected media outlets)?	L	L
GS9: Was the information forwarded to you?	H	H

Indicators on Social media analysis / formal profile for social media accounts

Posts related

- #replies
- is reply
- #retweets
- #favorite
- user mention
- hashtags
- media

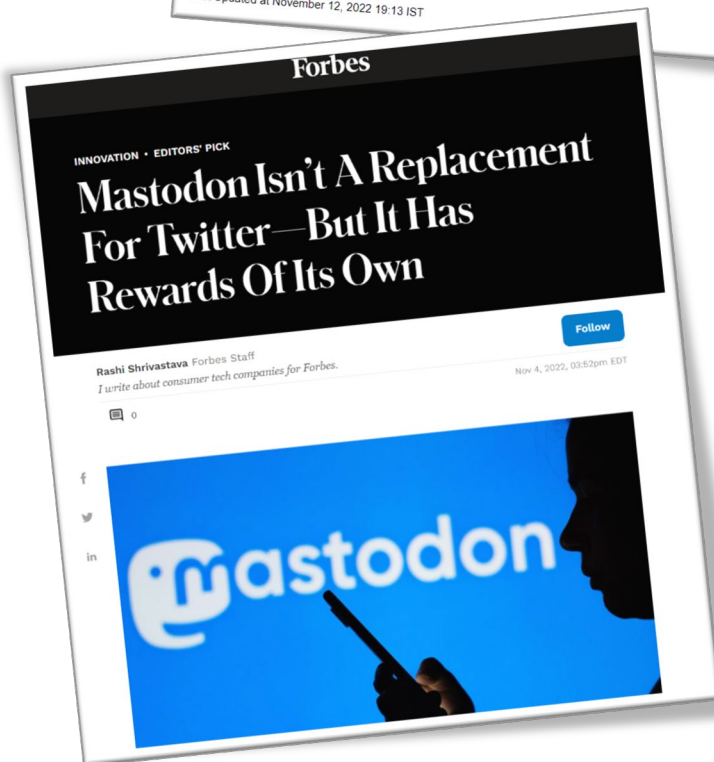
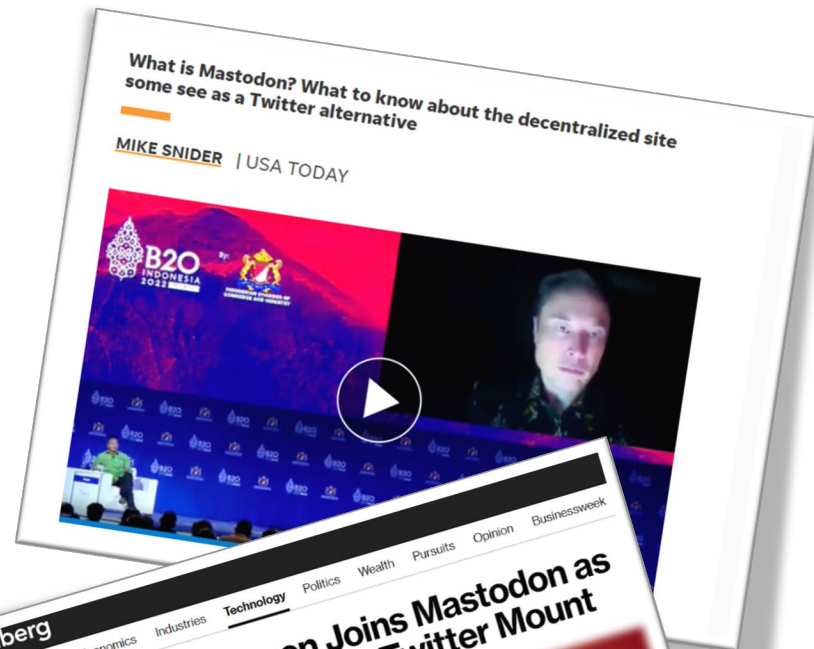
User related

- followers
- following
- account age
- statuses/user_timeline

Network related

- centrality
- community (e.g., Louvain)
- pagerank

.. In thIS episode



P7011

Standard for the Process of Identifying and Rating the Trustworthiness of News Sources

Active PAR[Home](#) > [Projects](#) > Standard for the Process of Identifying and Rating the Trustworthiness of News Sources

This standard provides semi-autonomous processes using standards to create and maintain news purveyor ratings for purposes of public awareness. It standardizes processes to identify and rate the factual accuracy of news stories in order to produce a rating of online news purveyors and the online portion of multimedia news purveyors. This process will be used to produce truthfulness scorecards through multi-faceted and multi-sourced approaches. The standard defines an algorithm using open source software and a score card rating system as methodology for rating trustworthiness as a core tenant in an effort to establish trust and acceptance.

1. Collaboration with VERITAS

OBJECTIVE 1	Analyse and better understand the sources and consequences of mistrust of society in science and challenges of open science and science-society co-creation.
OBJECTIVE 2	Build collaboration across a large spectrum of the “stewards of trust”, other stakeholders and relevant projects.
OBJECTIVE 3	Explore, develop and test methods and tools for guiding trust in science and addressing challenges of open science and science-society co-creation including innovative, inclusive and effective means of communicating and disseminating scientific findings and messages.
OBJECTIVE 4	Develop and validate a protocol of recommendations for stewards of trust, namely: (1) policy makers, (2) RFOs; (3) RPOs; (4) higher education institutions and (5) other R&I actors on guiding societal trust in the research system and confidence in its outcomes and ensure the uptake of the protocol.

.. In THE NEXT EPISODES

2. Explore mastodon



3. Investigate ways to link IEEE publications with Social Media

- Automatic posting on social networks of IEEE publication related material
 - Featured articles,
 - Special issues prefaces
 - Calls for papers
- Links to extra material
 - IEEE TV
 - Youtube
- Storage and management of post related information

Where do we start: IEEE IT Professional magazine

4. Contact IEEE P0701 group

WORKING GROUP DETAILS

Society IEEE Society on Social Implications of Technology
[Learn More >](#)

**Sponsor
Committee** SSIT/SC - Social Implications of Technology Standards
Committee
[Learn More >](#)

Working Group NST_WG - News Site Trustworthiness Working Group
[Learn More >](#)

**IEEE Program
Manager** Christy Bahn
[Contact >](#)

**Working Group
Chair** Peter Reid

TCSN Invited Talk

Title: The Hitchhiker's Guide to the Metaverse

Speaker: Prof. Pan Hui, Hong Kong University of Science and Technology (Guangzhou); International Fellow of the Royal Academy of Engineering, Member of Academia Europaea, IEEE Fellow, and ACM Distinguished Scientist

Date: 29 November 2022 (Tuesday)

Time: 10:00 AM HKT (UTC+08:00); (9PM EST, 28 November)

Zoom link: <https://rebrand.ly/HitchhikerGuideToMetaverse>



Abstract: We envision in the future the virtual world will mix and co-exist with the physical world in such an immersive way that we cannot tell what is real and what is virtual. We will live and interact with the virtual objects that are blended into our environments with advanced holographic technology or with high-quality head mounted displays and lose the virtuality boundary. We call such a new reality Surreality. Our vision of “metaverse” is a multi-world. There are multiple virtual worlds developed by different technology companies and there is also the Surreality where real and virtual merged. While the metaverse may seem futuristic, catalysed by emerging technologies such as Extended Reality, 5G, and Artificial Intelligence, the digital “big bang” of our cyberspace is not far away. This talk aims to offer a comprehensive framework that examines the latest metaverse development under the dimensions of state-of-the-art technologies and metaverse ecosystems, illustrates the possibility of the digital “big bang”, and propose a concrete research agenda for the development of the metaverse.

TCSN Officers

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

Next Meeting

- Next TCSN meeting at ICC'23, Rome.
See you then!



IEEE International Conference on Communications
28 May – 01 June 2023 // Rome, Italy
Sustainable Communications for Renaissance



Reminder to Register

- The IEEE ComSoc Technical Committee on Social Networks
- Reminder to write your information in chat:
 - ✓ *your name + affiliation + email*

Motion: Burak Kantarci (University of Ottawa, Canada)

Second: Charalampos (Babis) Z. Patrikakis (University of West Attica, Greece)

Voting:

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

**ADJOURN &
THANK YOUR ATTENDANCE**