

Social Networks TC Meeting

IEEE ICC 2022

Date: April 15, 2022

Time: 10:00 – 11:00 am 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 2021 minutes
- Distinguished Invited Speaker – Prof. Vincent Chan
- Standardization activities update – Prof. Charalampos Patrikakis
- TCSN members and activities
- TCSN status
- Newsletter
- Journal activities
- Volunteers for the SAC tracks in GCs and ICCs
- Special interest groups (SIGs)
- 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 GC 2021 minutes

- IEEE ComSoc Social Networks Technical Committee
<https://sn.committees.comsoc.org>
- Approval of GLOBECOM 2021 meeting minutes
- <http://site.ieee.org/comsoc-sn/files/2022/04/TCSN-Meeting-Minutes-at-GC-2021.pdf>
- Motion: Burak Kantarci (University of Ottawa, Canada)
 - Second: Neeli Prasad (Trusted Mobi, "VehicleAvatar Inc", USA)
 - Voting: All in favor

Distinguished Invited Speaker

President Vincent Chan

MIT EECS

Title: Privacy, Misinformation, and Discrimination in Online Social Networks

Short Bio:

Vincent W. S. Chan, the Joan and Irwin Jacobs Professor of EECS, MIT, received his BS(71), MS(71), EE(72), and Ph.D.(74) degrees in EE all from MIT. He is currently a member of the Claude E. Shannon Communication and Network Group at the Research Laboratory of Electronics of MIT. He also formed and served as PI the Next Generation Internet Consortium, ONRAMP among AT&T, Cabletron, MIT, Nortel and JDS, and a Satellite Networking Research Consortium formed between MIT, Motorola, Teledesic and Globalstar. He also has been active with several start-ups and was a director of a Fortune-500 company and chaired its technical advisory board. He is a Member of the Corporation of Draper Laboratory and is a member of Eta-Kappa-Nu, Tau-Beta-Pi and Sigma-Xi, and the Fellow of the IEEE and the Optical Society of America. He is currently the Chair of the Strategic Planning Committee and the President of the IEEE Communication Society.

Proposals on Standardisation Topics

Prof. Charalampos (Babis) Z.
Patrikakis

University of West Attica



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

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

Related paper (pre-print)

*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 *SYNYO GmbH, Austria*

^c *Trilateral Research, Ireland*



deVEloping scientific Research with ethlcs and inTegrity for shAred benefitS



HORIZON-WIDERA-2021-ERA-01-44
Type of Action: HORIZON-RIA
Proposal number: 101058623

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

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

- Keynote address “Physical and computational modeling of smart homes,” at ELEVATE’22, sponsored by IEEE IEM Student Branch and Computer Society of IEEE IEM, Kolkata Section, Region 10, April 14, 2022
- Panelist at Women In Engineering Workshop of the International Conference on the Design of Reliable Communication Networks (DRCN'22), March 31, 2022
- Invited Talk on “IoT-enabled smart homes and smart healthcare,” ACM-W Chapter at University of Ottawa, March 2, 2022

Prof. De-Nian Yang, Academia Sinica, Taiwan

- IEEE TPDS Award for Editorial Excellence

Prof. Burak Kantarci, University of Ottawa, Canada

- Minister’s Award of Excellence in Innovation and Entrepreneurship from Ontario Ministry of Colleges and Universities
- Invited Talk “Trustworthiness and Security in IoT Sensing” IEEE Canada Technology Leadership Webinar Series XI, January 2022.
- Things Happen Podcast Series by IoT North, “Innovating Smart Connected Vehicles and Cities” <https://directory.libsyn.com/episode/index/show/iotnorth/id/22186334>

TCSN Status

- Mail list
 - Currently: 1188 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
 - ✓ Guest editors: Celimuge Wu, Kok-Lim Alvin Yau, Zonghua Zhang, Damla Turgut, Shiwen Mao
 - ✓ Submission deadline: December 10, 2021
 - ✓ Publication: June 2022
 - ✓ 74 submissions out of which 54 reviewed and 20 moves to the second round
 - IEEE IT Professional (2021)
 - ✓ Information Hygiene and the Fight against the Misinformation Info-demic
 - ✓ Guest editors: George Loukas, Stephen J. Andriole, San Murugesan
 - ✓ Publication: March/April 2022

Journal Activities

- Special Issues
 - IEEE Communications Magazine (2020-2021)
 - ✓ Networking Technologies to Combat the COVID-19 Pandemic
 - Guest editors: Valeria Loscrí, Anna Maria Vegni, De-Nian Yang
 - Submission Deadline: 1 January 2021
 - Publication: September 2021
 - 41 papers submitted with 5 published
 - Detection and forecast of pandemic, devices for contact tracing with privacy, video and radio technologies for social distancing
 - IEEE Transactions on Network Science and Engineering (2020-2021)
 - ✓ Healthcare Social Analytics
 - Guest Editors: Ebrahim Bagheri, Fattane Zarrinkalam, Diana Inkpen, Daniel Dajun Zeng, and Christopher C. Yang
 - Submission Deadline: 1 November 2021

Journal Activities

- Special Issues
 - IEEE Transactions on Network and Service Management (2022)
 - ✓ Machine Learning and Artificial Intelligence for Managing Networks, Systems, and Services
 - Topic of interest: **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
 - IEEE Open Journal of the Communications Society (2021-2022)
 - ✓ Blockchain-enabled Collaborative Cognitive Communication Systems
 - Topic of interest: Blockchain-enabled **Social** and Collaborative Computing Systems
 - Guest Editors: Muddesar Iqbal (Lead), Shancang Li, Xinheng Wang, Ashutosh Dutta, Wei Cai, Xavier Costa-Pérez
 - Submission Deadline: 31 December 2021
 - Publication: First Quarter 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: Anna Maria Vegni

Volunteers for Future Conferences

- ICC/GLOBECOM
 - ICC 2022 Seoul
 - ✓ Rep: Abderrahim Benslimane
 - ✓ 25 submissions
 - GC 2022 Rio de Janeiro
 - ✓ Rep: Neeli Prasad
 - ICC 2023 Rome
 - ✓ Rep: De-Nian Yang
 - GC 2023 Kaula Lumpur
 - ✓ Rep: Burak Kantarci
 - ICC 2024 Denver
 - ✓ Rep: Eirini Eleni Tsiropoulou
 - GC 2024
 - ✓ Rep: Anna Maria Vegni
 - ICC 2025
 - ✓ Rep: Valeria Loscri

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: Anna Maria Vegni [Twice a year at ICC and Globecom]
 - Membership development: Eirini & Burak
 - ✓ Will continue to work on increasing the membership
 - ✓ We have 1188 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

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

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. Due to this huge application field, not limited to IoT, and since social aspects can find applicability in different fields, we extend the definition of Social IoT to Social Internet of Anythings. In this context, we are aware that new threats can emerge and make the SloA more vulnerable to cyber attacks. The SloA will focus on research activities on all these aspects. SloA SIG aims to provide a platform for researchers and practitioners from academia and industry to discuss relevant topics and exchange views on the important issues of SloA provisioning, social networking and connectivity, social community detection and prediction, social ties and hub nodes for communication networks, cross-layer design and inter-operability between communication networks and social networks. It will also assist the TCSN by organizing and supporting ComSoc-sponsored conferences and workshops, special issues and feature topics of relevant journals.

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: Logo Context Initiative

Logo context

Since the creation of the SIG SloA, the Chairs have advanced in the definition of a logo that better depicts the main topics covered by the SIG. A **Logo Creation Contest initiative** has been suggested in order to involve all the interested members of TCSN, especially students and post-docs, to send in their logo design idea.

The SIG SloA Chairs will select the best, most appropriate and suitable logo, whose creator will be awarded of a free registration to the 1st Intl. Workshop on Social Internet of Anythings, in conjunction with IEEE WiMob 2022.

- <https://sn.committees.comsoc.org/call-for-papers/the-1st-international-workshop-on-social-internet-of-anything-sioa22/>
- <http://www.wimob.org/wimob2022/index.html>

Paper submission deadline for the workshop: **July 31, 2022**

SloA SIG: Invited Seminar

Invited seminars are expected to be delivered every two months by selected researchers in the field of social networking and communications

- The 1st Invited Seminar was delivered by Prof. Iera, on February 25, 2022



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

SloA SIG: Invited Seminar

Invited seminars are expected to be delivered every two months by selected researchers in the field of social networking and communications

- The 2nd Invited Seminar will be delivered by Prof. Morabito, on April 29, 2022



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

- Registration link: <https://forms.gle/snGNueqy39r6mNYx7>

TCSN Officers

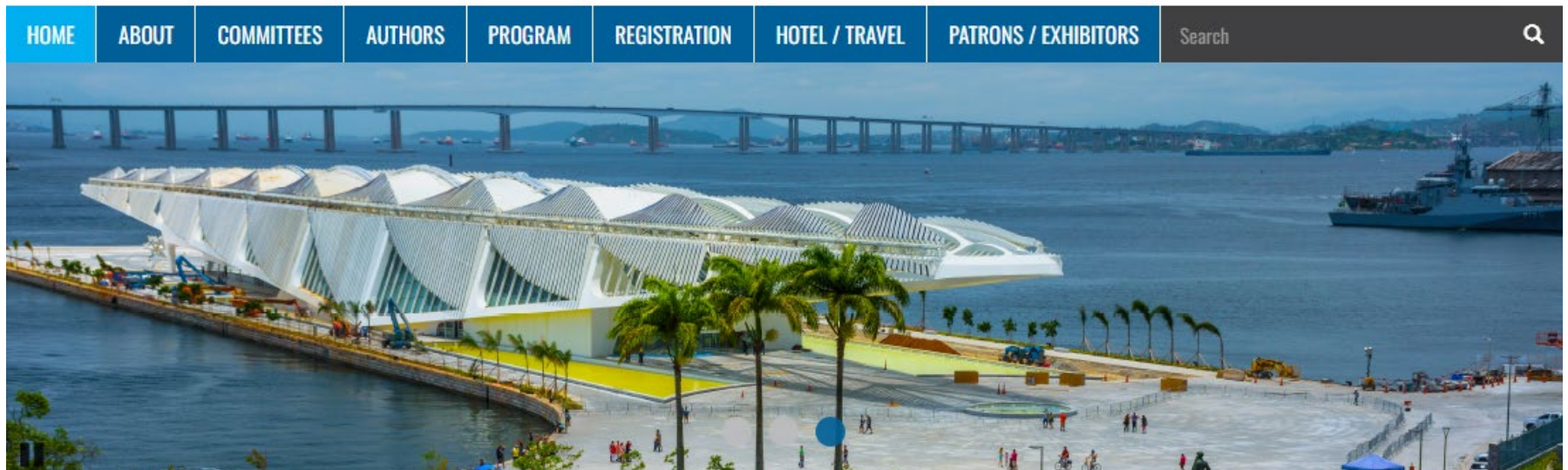
- Chair: Damla Turgut, Damla.Turgut@ucf.edu
- Vice-Chair: De-Nian Yang, dnyang@iis.sinica.edu.tw
- Secretary: Burak Kantarci, burak.kantarci@uottawa.ca

Next Meeting

- Next TCSN meeting at GC'22, Brazil.
See you then!



IEEE Global Communications Conference
4-8 December 2022 // Rio de Janeiro, Brazil // Hybrid: In-Person and Virtual Conference
Accelerating the Digital Transformation through Smart Communications



Reminder to Register

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

Motion: De-Nian Yang (Academia Sinica)

Second: Burak Kantarci (University of Ottawa, Canada)

Voting:

Thanks for attending and see you in next TCSN meeting at GLOBECOCM 2022!

**ADJOURN &
THANK YOUR ATTENDANCE**