TC Social Networks Meeting at ICC 2021, Zoom Meeting

Date: Tuesday, July 6, 2021
Time: 7:00 am - 9:00 am EST
Room: Zoom (16 participants)

Meeting Agenda
- This is the 11th TC meeting for the Technical Committee on Social Networks that has been established and functioning from January 1, 2016.
  - Approval of meeting minutes
  - Approval of agenda
    - Motion: Damla Turgut (University of Central Florida, USA)
    - Second: Burak Kantarci (University of Ottawa, Canada)
  - Website: IEEE ComSoc Technical Committee, https://sn.committees.comsoc.org
- Agenda
  - Welcome and Introductions
  - Scope of TCSN
  - Approval of the GC 2020 minutes
  - Invited speaker
  - TCSN members and recognitions
  - TCSN status
  - Journal activities
  - Volunteers for the SAC tracks in GCs and ICCs
  - Secretary election
  - Newsletter
  - Special interest groups (SIGs)
  - Awards & IEEE ComSoC Student Competition
  - Other discussion topics
  - Adjourn

Scope of 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

Invited Speakers

- ■ Privacy-preserving Contact Tracing: Theory and Practice (Prof. Hsu-Chun Hsiao)
  - ○ Bio: Dr. Hsu-Chun Hsiao is an Associate Professor in the Department of Computer Science and Information Engineering, and the Graduate Institute of Networking and Multimedia at National Taiwan University. She also holds an adjunct position in the Center of Information Technology and Innovation at Academia Sinica and serves as a Section Chief in the Information Technology Office, National Taiwan University Hospital. Dr. Hsiao completed her B.S. and M.S. at National Taiwan University in 2006 and 2008, respectively, and Ph.D. at Carnegie Mellon University in 2014. Dr. Hsiao's research interests lie in the field of network and systems security, and her recent work focuses on DDoS defense, IoT security, and automated vulnerability discovery. She is a recipient of the MOST Young Scholar Fellowship, K. T. Li Young Researcher Award, ACM CyberW Early Career Award Honorable Mention, Ren Min Outstanding Young Chair Professorship, and Delta Research Excellence Award.

TCSN Members and Recognitions

- 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
- Congratulations to our members for receiving the following awards:
  - Prof. Burak Kantarci, University of Ottawa, Canada
    - ACM Senior Member
    - Johns Evans Leaders Fund by Canada Foundation for Innovation to establish the Smart Connected Vehicles Innovation Hub. in Ottawa. Vehicular Social Network will be a core component of the Smart Connected Vehicle Innovation Hub
    - The ICNC'20 Outstanding Leadership Award but this was in Feb 2020
  - Prof. De-Nian Yang, Academia Sinica, Taiwan
    - 2020 ACM Distinguished Member
  - Prof. Damla Turgut, University of Central Florida, USA
    - IEEE ComSoc Distinguished Lecturer, 2021-2022

Keynotes, Speeches, Panels, etc.
- Prof. Neeli Prasad, SmartAvatar B.V. NL and VehicleAvatar Inc., USA
  - Title: Cyber Security for Cyber Physical Systems; IEEE ICC 2021 Workshop on Sensing-as-a-service for Industrial Cyber Physical Systems (I-CPSAAS), June 18, 2021.
  - Title: How to bridge the gender gap in ICT? Equality or Equity?; N2Women panel, June 17, 2021.
- Prof. Patrikakis Charalampos, University of West Attica, Greece
  - Title: Fighting Misinformation on Social Network; IEEE GLOBECOM 2020 Industry Forum
  - Title: Human Aspects of Misinformation Online; ACM CHI workshop

TCSN Status
- Mail list
  - Currently: 938 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
  - https://listserv.ieee.org/cgi-bin/wa?SUBED1=IEEESTC&A=1
- Social media
  - Twitter: @IEEEComSoc_TCSN
  - LinkedIn: IEEE ComSoc Social Networks Technical Committee
  - Facebook fan page: IEEE ComSoc Social Networks Technical

Committee

Journal Activities
- Special Issues
  - JSAC (a section in emerging technologies, 2012)
    - Published in September 2013
  - IEEE Wireless Communications
    - Mobile Social Networks, 2014
  - IEEE JSTSP
    - Signal processing for social networks, 2014
  - IEEE Network
    - Networking for Big Data, 2014
  - IEEE JSAC Emerging Technology (a section, 2015)
  - KICS/IEEE JCN
    - Mobile Social Networks, 2015
  - IEEE Communication Magazine (2015)
  - IEEE Access (2016)
  - IEEE Journal of Selected Topics in Signal Processing (2017)
    - Signal Processing and Machine Learning for Education and Human Learning at Scale
  - Neurocomputing (2017)
    - Machine Learning for Non-Gaussian Data Processing
  - IEEE Transactions on Affective Computing (2017)
    - Affective Reasoning for Big Social Data Analysis
  - IEEE Transactions on Emerging Topics in Computing (2017)
    - Cyber Social Computing and Cyber-Enabled Applications
  - IEEE CS IT Professional (2017)
    - Graph Databases
  - IEEE Internet of Things Journal (2017)
    - Special Issue on Emerging Social Internet of Things: Recent Advances and Applications
  - IEEE Communication Magazine (2018)
    - Data Science/Artificial Intelligence Series
  - IEEE IoT journal (2019)
    - IoT and Big Data
  - IEEE Trans. on Computational Social Systems (2020)
    - Computational Social Systems for COVID-19 Emergency Management and Beyonds
      - Guest editors: Neeli Prasad, De-Nian Yang, Damla Turgut and others
      - Publication: June 2020
    - Collaborative Edge Computing for Social Internet of Things Systems
      - Guest editors: Zhaolong Ning, MengChu Zhou, Yong Yuan, Edith C. H. Ngai, and Ricky Y. K. Kwok
      - Publication: June 2021
  - 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, 4:00 pm US Eastern time
- IEEE Transactions on Network Science and Engineering (2020-2021)
  - Computing and Networking for Cyber-Physical-Social Systems
    - Guest editors: Hai Jiang (Lead), A. B. M. Shawkat Ali, Beniamino Di Martino, and Bernady O. Apduhan
    - Final Accepted Manuscript Due: 15 July 2021
  - Healthcare Social Analytics
    - Guest Editors: Ebrahim Bagheri, Fattane Zarrinkalam, Diana Inkpen, Daniel Dajun Zeng, and Christopher C. Yang
    - Submission Deadline: 1 November 2021
- IEEE ACCESS (2021)
  - Collaborative Intelligence for Internet of Vehicles
  - Guest editors: Celimuge Wu, Soufiene Djahel, Damla Turgut, Sidi-Mohammed Senouci, Lei Zhong
  - Submission deadline: July 31, 2021
- IEEE IT Professional (2021)
  - Information Hygiene and the Fight against the Misinformation Info-demic
  - Guest editors: George Loukas, Stephen J. Andriole, San Murugesan
  - Publication: Mar 2022
- 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

TCSN Officers (2018 - 2020)
- Chair: Neeli Prasad (International Technological University, USA)
- Vice Chair: Damla Turgut (University of Central Florida, USA)
  - Special mission: initiation of more technical activities
- Secretary: De-Nian Yang (Academia Sinica, Taiwan)
  - Special mission: committee meeting logistics, enrichment of mailing list
- Information Officers: (volunteers needed and please contact neeliprasad@gmail.com)
  - Web: De-Nian Yang (Academia Sinica, Taiwan)
  - Newsletters: Anna Maria Vegni (Roma Tre University, Italy)
  - Membership development: Eirini Eleni Tsiropoulou (University of New Mexico, USA) and Burak Kantarci (University of Ottawa)
    - Will continue to work on increasing the membership
    - We have 938 members
  - Award committee:

- We need to work on this (To do item)
- Diversity is important and Vincent Chan said we have no diversity issues in this TC
  - ○ Industry liaison: Charalampos Patrikakis (University of West Attica, Greece)
    - Industry and other related project
  - ○ Liaison to ComSoc Standardization Board: Charalampos Patrikakis (University of West Attica, Greece)
    - Vincent Chan mentioned that IEEE is collaborating with industry in silicon valley to discuss which topics should be standardized and how to do it
  - ○ Liaisons to TSCBD: Contact Shui Yu (Deakin University, Australia) and Jie Li (Shanghai Jiao Tong University, China) for some collaboration.
  - ○ Marketing: Neeli Prasad (International Technological University, USA) and De-Nian Yang (Academia Sinica, Taiwan)

Conference Activities
- ■ 1st Workshop on Social Networks at ICC 2010
- ■ ICC/GLOBECOM
  - ○ GLOBECOM 2013
    - Track in SAC, Rep: K.C. Chen (National Taiwan University, Taiwan); 40 submissions and 15 accepted
    - Industrial panel: Microsoft, Cisco, Qualcomm
  - ○ ICC 2014
    - Rep: Neeli Prasad (International Technological University, USA)
  - ○ GLOBECOM 2014
    - Rep: Xianbin Wang (West Ontario University, Canada)
  - ○ ICC 2015
    - Rep: Symeon Papavassiliou (National Technical University of Athens, Greece); 60+ submissions and 4 technical sessions
  - ○ GLOBECOM 2015
    - Rep: Jelena Misic (Ryerson University, USA); 42 submissions
  - ○ ICC 2016
    - Rep: Pan Hui (Hong Kong University of Science and Technology, Hong Kong); 50 submissions and 19 papers are accepted (3 oral sessions and 2 interactive sessions)
  - ○ GLOBECOM 2016
    - Rep: K.P. Suba Subbalakshmi (Steven Institute of Technology, USA)
  - ○ ICC 2017
    - Rep: Damla Turgut (University of Central Florida, USA), 52 submissions
  - ○ GLOBECOM 2017
    - Rep: Lie-Liang Yang (University of Southampton, UK), 44 submissions (18 accepted)
  - ○ ICC 2018

- Rep: Dusit Niyato (Nanyang Technological University, Singapore)
  - GLOBECOM 2018
    - Rep: De-Nian Yang (Academia Sinica, Taiwan), 56 submissions (24 accepted)
  - ICC 2019
    - Rep: Xiaoyan Zhu (Xidian University, China)
  - GC 2019
    - Rep: Jelena Misic (Ryerson University, USA)
  - ICC 2020 Dublin
    - Rep: Neeli Prasad (International Technological University, USA)
    - 19 submissions, 8 accepted papers (acceptance ratio of ~39%)
  - GC 2020 Taipei
    - Rep: Eirini Eleni Tsiropoulou (University of New Mexico, USA)
    - 26 submissions (among the top numbers in the SACs), 10 accepted papers (acceptance ratio of ~38%)
  - ICC 2021 Montreal
    - Rep: Damla Turgut (University of Central Florida, USA)
    - 22 submissions (acceptance ratio of ~40%)
  - GC 2021 Madrid
    - Rep: De-Nian Yang (Academia Sinica, Taiwan)
    - 54 submissions (review process ongoing)
  - ICC 2022 Seoul
    - Rep: Abderrahim Benslimane (University of Avignon, France)
  - GC 2022 Rio de Janeiro
    - Rep: Neeli Prasad (International Technological University, USA)
  - ICC 2023 Rome
    - Rep: De-Nian Yang (Academia Sinica, Taiwan)
  - GC 2023 Kuala Lumpur
    - Rep: Neeraj Kumar (Thapar Institute of Engineering & Technology, India)
  - ICC 2024 Denver
    - Rep: Eirini Eleni Tsiropoulou (University of New Mexico, USA)
  - GC 2024
    - Rep: Please volunteer via submitting your short bio to the TCSN officers
  - CCNC 2017
    - Rep: Neeli Prasad (International Technological University, USA)
  - CCNC 2018 and 2019
    - Rep:
- Goal: increase the number of submissions
  - Update topics in CFP
  - Advertise the CFP to the social media

- ○ Advertise the CFP to the authors of the previous symposiums
- ○ Advertise the CFP to the authors of previous ICCs and GCs
- ○ Regional mailing lists
- ○ Update TPC members in TCSN (we need to incentivize new people)

TCSN Secretary Election
- ■ Nominations and Elections Committee (announced to all TCSN members via email on December 7, 2020)
- ■ The mandate of the current Chair of TCSN is ending in 2021
- ■ According to the new P&Ps of COMSOC, Damla Turgut and De-Nian Yang will be elevated to Chair and Vice-Chair, respectively. Therefore, an election for the secretary position will be held
- ■ As per the new P&Ps, the candidates must be COMSOC members and active members of TCSN (i.e., attendees of at least **3** TCSN meetings in the past 3 years with realistic contributions to TCSN activities)
- ■ A Nomination and Election Subcommittee (N&E) is formed as follows to verify the active status and willingness to serve for the candidates for the election:
  - ○ Kwang-Cheng Chen (Chair) (University of South Florida, USA)
  - ○ Neeli Prasad (SmartAvatars, Netherlands)
  - ○ De-Nian Yang (Academia Sinica, Taiwan)
- ■ Candidates for Secretary Position (announced to all TCSN members via email on December 7, 2020)
  - ○ Burak Kantarci, University of Ottawa
  - ○ Abderrahim Benslimane, University of Avignon
  - ○ Sudip Misra, Indian Institute of Technology
- ■ E-Ballot took place (June 30 – July 5 2021). Results:
  - ○ **Burak Kantarci: 4**
  - ○ Abderrahim Benslimane: 3
  - ○ Sudip Misra: 3

Newsletters/FB
- ■ Newsletters and/or Facebook
  - ○ Twice a year
- ■ Editors:
  - ○ Issue no. 1: Damla Turgut
  - ○ Issue no. 2: Neeli Prasad
  - ○ Issue no. 3: De-Nian, Damla, and Eirini
  - ○ 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

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
- 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

Award(s)
- New awards might need approval by the ComSoc Award Committee
- We need to follow P&P to establish any award (and award committee)
  - ○ Follow the constitution of the procedure, which needs approval by Technical and Education Committee
  - ○ Need to set up the ad-hoc committee to change the procedure
  - ○ New policy has been set

TCSN survey results
- What are the current issues and the needs of the TC in your opinion?
  - ○ We need to find a way to interest and to involve more researchers
  - ○ Building a strong community
- What are the promising future technological directions of interest to TCSN?
  - ○ Social aspects of mobile AR/VR: 15 (43%)
  - ○ Location- and tracking-based mobile social networking: 13 (37%)
  - ○ Social networks and anthropogenic climate change: 8 (23%)
  - ○ Social interaction-based recommendation: 16 (46%)
  - ○ Health search and mining on social networks: 15 (43%)
  - ○ Integrity in social networks and media: 18 (51%)
  - ○ Social networks for disaster management: 10 (29%)
  - ○ Misinformation and misbehavior mining on social networks: 21 (60%)
  - ○ Social network analysis of humanitarian mapping: 5 (14%)
  - ○ Cross-layer design of communication networks and social networks: 15 (43%)
  - ○ Epidemic social network analysis for COVID-19 pandemic: 20 (57%)

- Multimodal social behavior analysis for home-quarantined users immersed with digital media: 10 (29%)
- Other: 3 (9%)
  - Graphical and latent structures of social networks
  - Decentralization of social networks
  - Security and privacy in social networks, social sensing
- What are the better TC plans to pursue those directions?
  - Subcommittee and special interest groups (SIGs): 23 (66%)
  - Special issue and workshop proposal: 31 (89%)
  - Summer and winter school: 11 (31%)
  - Newsletter: 10 (29%)
  - Liaison to other communities: 3 (9%)
  - Other: 1 (3%)
    - Awards

New Issues (Other Discussion Topics)
- Online seminars
- More activities
  - Please put activity announcements on committee web
  - COVID-19 related SI, Chapters, Books, etc.
  - DLs
  - Please put activity announcements on committee web
  - Summer/winter school?
    - Funding issue
    - Contact issue
    - TC can endorse technical sponsorship of international conferences organized by TC members
  - Workshops etc. at ICC/GC/INFOCOM/CCNC for security/privacy, big data, etc.
  - SI for IEEE journals
  - TC can endorse technical sponsorship of international conferences organized by TC members

Adjourn
- Motion: Damla Turgut (University of Central Florida, USA)
- Second: Eirini Eleni Tsiropoulou (University of New Mexico, USA)

Attendee List

Name	Affiliation	Email
Neeli Prasad (Chair)	SmartAvatar B.V., Netherlands & TrustedMobi "VehicleAvatar Inc." USA	neeliprasad@gmail.com
Damla Turgut (Vice Chair)	University of Central Florida	Damla.Turgut@ucf.edu
De-Nian Yang (Secretary)	Academia Sinica	dnyang@iis.sinica.edu.tw
Abderrahim Benslimane	Avignon University	abderrahim.benslimane@univ-avignon.fr

Anna Maria Vegni	Roma Tre University	annamaria.vegni@uniroma3.it
Arijit Roy	University of Luxembourg	arijitroy.net@gmail.com
Burak Kantarci	University of Ottawa	burak.kantarci@uottawa.ca
Charalampos Patrikakis	Professor UniWA	bpatr@uniwa.gr
Chih-Yu Wang	Academia Sinica	cywang@citi.sinica.edu.tw
Eirini Eleni Tsiropoulou	University of New Mexico	eirini@unm.edu
Frank Li	University of Agder	frank.li@uia.no
Melike Erol-Kantarci	University of Ottawa	Melike.erolkantarci@uottawa.ca
Michele Nitti	University of Cagliari	michele.nitti.it@ieee.org
Sudip Misra	IIT Kharagpur	sudip_misra@yahoo.com
Symeon Papavassiliou	National Technical University of Athens	papavass@mail.ntua.gr
Valeria Loscri	Inria Lille - Nord Europe	valeria.loscri@inria.fr