IEEE Communications Society Technical Committee on Smart Grid Communications

IEEE ICC 2019
Venue: Nanjing I, Level 3, Pudong Shangri-La Hotel
Time: 16:00-17:00, May 21st
Agenda

• Welcome and Introduction
• Reports on Member Development
• Reports on Biannual Report
• Reports on Nominations
• Conference and Journal Reports
• Special Interest Groups (SIGs)
• Any Other Business
Mission Statement

• Support the IEEE Smart Grid Initiative
• Promote ComSoc’s position in the development and promotion of smart grid related technologies
• Ensure that ComSoc members play a decisive technological role in smart grid communications, control, and computing

• Website: http://sg.committees.comsoc.org/
History

• Started as an Ad-Hoc Smart Grid Communications Committee in 2010.
• Renamed as Emerging Technical Committee on Smart Grid Communications in 2013.
• Elevated to a full Technical Committee in Dec. 2018.
• Past Officers
  – 2014-2017: Vincent Wong (Chair), Lutz Lampe (Vice Chair), Hamed Mohsenian-Rad (Vice Chair), Stephen Bush (Vice Chair), George Michailidis (secretary)
  – 2012-2014: Petar Popovski (Chair)
  – 2011-2012: Stefano Galli (Chair)
Officers

• Chair: Angela Yingjun Zhang, CUHK, Hong Kong
• Vice Chair: Hamed Mohsenian-Rad, UCR
• Vice Chair: Hans-Peter Schwefel, Aalborg
• Secretary: Christian Wietfeld, TU Dortmund

• Member Relations Chair: Liping Qian, ZJTU
Member Development

• Our TC has 229 registered members as of May 2019.
• To become a member, sign up the TCSGC mailing list at https://comsoc-listserv.ieee.org/cgi-bin/wa?SUBED1=asgcc&A=1
• To become a voting member, attend at least two out of the last five TCSGC meetings
• TCSGC meetings are held twice a year at IEEE ICC and IEEE SmartGridComm.
• Members please fill in the TC member information form https://www.comsoc.org/form/comsoc-technical-committee-member
Composition of Members in Different Countries

- USA: 24%
- China: 18%
- Germany: 9%
- Canada: 7%
- Italy: 5%
- Hong Kong: 4%
- Belgium: 1%
- Austria: 1%
- Australia: 1%
- Spain: 2%
- India: 2%
- Denmark: 2%
- Brazil: 3%
- France: 1%
- UK: 1%
- Singapore: 1%
- Portugal: 1%
- Greece: 1%
- Japan: 1%
- Others: 8%
Biannual Report

• Submitted in Sept. 2018 to Emerging Technologies Committee for biannual ETI review.

• Can be viewed at
Nominations
Nominations

• IEEE ICC 2019 SAC Smart Grid Communications: Kemal Akkaya, Florida International University, USA

• IEEE Globecom 2019 SAC Smart Grid Communications: Suzhi Bi, Shenzhen U, China

• IEEE ICC 2020 SAC Smart Grid Communications: Anna Scaglione, Arizona State University, USA

• IEEE Globecom 2020 SAC Smart Grid Communications: Yang Xiao, The University of Alabama, USA

• IEEE ICC 2021 SAC Smart Grid Communications: György Dán, KTH
Nominations (Cont’d)

• IEEE SmartGridComm 2019
  – Communications and Networking Symposium: Anurag Srivastava, Washington State University
  – Control and Operation Symposium: Ruilong Deng, Nanyang Technological University
  – Data Analysis and Computation Symposium: Yuen Chau, Singapore University of Technology and Design
  – Cyber Security and Privacy Symposium: Daisuke Mashima, Illinois at Singapore Pte Ltd.
Nominations (Cont’d)

• IEEE Comsoc Distinguished Lecturers
  – Vincent Wong, UBC, 2018

• Selection Committee, The 6th IEEE ComSoc Student
  Competition Program, 2018
  – Fang Yang, Tsinghua University, China

Call for Nominations announced regularly via the
TCSGC mailing list
If you are interested in being nominated, please
contact one of the officers
Call For Nominations

• TCSGC Outstanding Service Award
  – The nominee must be an active TCSGC member at the time of nomination
  – The nominee must have been an TCSGC member for a sustained period of time and have made significant contributions to TCSGC over the period
  – Deadline: June 20, 2019
Call For Nominations

• **TCSGC Technical Achievement Award**
  – The nominee must be an active TCSGC member at the time of nomination
  – The nominee must have done outstanding technical work in the field of the TCSGC
  – The nominee must have achieved a high degree of visibility for the work and for TCSGC in the community
  – Deadline: June 27, 2019
Call For Nominations

• IEEE SmartGridComm 2020 Symposium Chairs
  – Cybersecurity and Privacy Symposium
  – Communications and Networking Symposium
  – Control and Operations Symposium
  – Grid Analysis and Computation Symposium
  – Deadline: May 24, 2019
Journals and Conferences
IEEE JSAC

• Special Issue on Communications and Data Analytics in Smart Grid
• Guest Editors
  – Yingjun Angela Zhang (CUHK, TC Chair)
  – Hans-Peter Schwefel (Aalborg, TC Vice Chair)
  – Hamed Mohsenian-Rad (UC Riverside, TC Vice Chair)
  – Christian Wietfeld (TU Dortmund, TC Secretary)
  – Chen Chen (Argonne, SIG Chair)
  – Hamid Gharavi (NIST)
• Manuscript due: June 1, 2019
• Publication date: First Quarter, 2020
IEEE Internet of Things Journal

- Special Issue on Internet-of-Things for Smart Energy Systems
- Guest Editors:
  - Sid Chau (SIG Chair)
  - Yingjun Angela Zhang (TC Chair)
  - Vincent Wong (Past Chair)
  - Hans-Peter Schwefel (TC Vice Chair)
- Manuscript due: Sept. 2018
- Publication date: 2019
- Manuscript received: 40
- Manuscript accepted: 10
IEEE SmartGridComm 2018

• Oct. 29 – Nov. 1, 2018, Aalborg, Denmark
• General Chair: Petar Popovski (Aalborg U., Past Chair)
• TPC Co-Chairs:
  – John Thompson (U. of Edinburgh)
  – Hamed Mohsenian-Rad (UC Riverside)
  – Deepa Kundur (U. of Toronto)
  – Linus Thrybom (ABB Corporate Research)
• Number of papers submitted: 151
• Number of papers accepted: 75
• Number of invited papers: 15
IEEE SmartGridComm 2018: Technical Tracks

• Communications and Networking
  – Chairs: Woo Hau Chin (Toshiba Research Europe, UK), Deniz Gündüz (Imperial College London), Melike Erol-Kantarci (U. of Ottawa, Canada), Walid Saad (Virginia Tech., USA)

• Control and Operation
  – Chairs: Mahnoosh Alizadeh (UCSB), Hossein Akhavan-Hejazi (UCR), Hongjian Sun (Durham University, UK)

• Data Analytics and Computation
  – Chairs: Emre Can Kara (Stanford), Manish Marwah (HP Lab, USA), György Dán (KTH)

• Cyber Security and Privacy
  – Chairs: Rakesh Bobba (OSU), Lalitha Sankar (ASU), Saman Zouzouz (Rutgers)
IEEE GLOBECOM 2018

- Selected Areas in Communications (SAC) Symposium, Smart Grid and Power Line Communications Track
- Dec. 9-13, 2018, Abu Dhabi, UAE
- Chair: Giacomo Verticale, Politecnico di Milao, Italy
- Number of TPC members: 30
- Number of papers submitted: 31 (about 24 from Smart Grid area and the rest from PLC area).
- Number of papers accepted: 11 (about 11 from the Smart Grid area)
IEEE ICC 2019

• Selected Areas in Communications (SAC) Symposium, Smart Grid Communications Track
• May 20-24, 2019, Shanghai, China
• Chair: Kemal Akkaya, Florida International University
• Number of TPC members: 30
• Number of papers submitted: 29
• Number of papers accepted: 10
IEEE GLOBECOM 2019

• Selected Areas in Communications (SAC) Symposium, Smart Grid Communications Track
• Dec. 9-13, 2019, Waikoloa, HI, USA
• Chair: Suzhi Bi, Shenzhen University
• Number of TPC members: 44
• Number of papers submitted: 36
Special Interest Groups
SIG Communications and Networks to Enable the Smart Grid

- Chair: Andrea Tonello, U. of Klagenfurt, Austria
- Vice Chair: Hongjian Sun, U. of Durham, UK
- Recent activities:
  - IEEE/CIC ICCC Workshop on Connecting All Things for Enabling Smart Cities
    - General Chair: Hongjian Sun
    - Deadline: May 5, 2019
  - IEEE Access SI on Advances in Power Line Communications and Its Application
    - Guest Editors: Khaled Rabie, Andrea M. Tonello, Naofal Al-Dhahir, Jian Song, Alberto Sendin
    - Deadline: April 30, 2019
SIG Cyber Security and Privacy for the Smart Grid

- Chair: Chen Chen, Argonne, USA
- Vice Chair: Kevin Dong Jin, IIT, USA

Recent activities:

- IEEE SmartgridComm 2019 Tutorial on Electric Power Resilience
  - Speakers: Chen Chen and Kevin Dong Jin
- ACM SIGSIM Conference on Principles of Advanced and Distributed Simulation
  - General Chair: Kevin Jin
  - June 3-5, 2019, Chicago USA
SIG Active Distribution Grids and Microgrids

• Chair: Zhao Xu, PolyU, Hong Kong
• Vice Chair: Junhua Zhao, CUHK Shenzhen, China
• Recent activities:
  – ComSoc and PES HK Chapter Joint Seminars
    • Lingfen Wang (U. Wisconsin-Milwaukee)
    • Jacob Østergaard (TU Denmark)
    • Fangxing Li (UTK)
    • Steven Low (Caltech)
    • Jianhui Wang (SMU)
SIG Smart Metering, Demand Response and Dynamic Pricing

- Chair: Sid Chau, Australia National University
- Vice Chair: Hossein Akhavan-Hejazi, UC Riverside
- Recent activities
  - IEEE Trans. Sustainable Computing, Special Issue on Intersection of Computing and Communication Technologies with Energy Systems
    - Guest Editors: Sid Chau (ANU), David Irwin (UMass), Minghua Chen (CUHK), Sarvapali Ramchurn (U. Southampton)
    - By invitation. 14 papers submitted
  - JSAC SI on Design and Analysis of Communication Interfaces for Industry 4.0
    - Guest Editors: Sid Chau (ANU), et. al.
    - Deadline: July 1, 2019
SIG Big Data Management and Analytics

• Chair: Hamed Mohsenian-Rad, UC Riverside
• Vice Chair: Marco Levorato, UC Irvine
• Recent activities:
  – IEEE PES GM Panel on Big Data Analytics for Emerging Power Sensors and Internet-of-Things, 2018
    • Organizers: Hamed Mohsenian-Rad (UCR), Emma Stewart (Lawrence Livermore National Lab)
    • Participants: PingThings, NuGrid Power Corp, CPS Energy, RPU
  – IEEE PES GM Panel on Best Practices in Sharing of Big Data in Power systems, 2018
    • Organizers: Hamed Mohsenian-Rad (UCR), Ning Zhou (Binghamton)
    • Participants: Better Grids, Oncor, ISO-NY, BPA
SIG ICT-Enabled Transactive Energy and Grid Economics

- Chair: Lijun Chen, Colorado
- Vice Chair: Emiliano Dall’Anese, Colorado
- Recent Activities:
  - IEEE GlobalSIP 2018, Symposium on Information Processing, Learning, and Optimization for Smart Energy Infrastructures
    - TPC Chairs: Emiliano Dall’Anese (Colorado), Yue Zhao (Stony Brook), Hao Zhu (UT)
SIG Energy Storage and Electric Vehicles

- Chair: Chris Develder, U. Ghent, Belgium
- Vice Chair: Hamid Nazaripouya, UC Riverside
- Recent activities:
  - IEEE SmartgridComm 2018 Panel on Electric Vehicles in the Smart Grid: A Reality Check from Real-Life Deployments
    - Organizer: Chris Develder (U Ghent)
  - 2019 Energy Storage Technologies and Applications Conference, UC Riverside
    - Organizer: Hamid Nazaripouya (UC Riverside)
SIG Energy Internet and Energy System Integration

- Chair: Qinglai Guo, Tsinghua, China
- Vice Chair: Hao Zhu, UT Austin, USA
- Recent Activities:
  - IEEE EI^2 Panel on Data-Driven Method and Its Application on Power Systems
    - Organizer: Qinglai Guo
    - Oct. 21, 2018, Beijing, China
  - IEEE ISGT Asia, Chengdu. Mini-symposium on Key Technologies and Applications of Cyber Energy Systems Oriented to New-type Urbans
    - Organizer: Qinglai Guo
    - May 22, 2019, Chengdu, China
AoB
TC membership Form

• [https://www.comsoc.org/form/comsoc-technical-committee-member](https://www.comsoc.org/form/comsoc-technical-committee-member)
  – For ComSoc to get a precise measure of the TC membership.
  – Will be used for TC recertification
  – TCs can still use the mailing list the way they do now.

• There will be two de facto memberships, one for ComSoc members and the other for non-ComSoc members

• ComSoc members have the right to elect and be elected TC officers, including Chair, Vice Chair, and Secretary

• All members can engage in TC activities, including being appointed to any other positions such as SIG Chairs
Next Meeting


See you all in Beijing!
Thank you!