



**TCBD Meeting**  
**TC on Big Data**  
**ICC 2020, Virtual Conference**  
**July 14, 2020**

Number of participants: 27

# Agenda

- 1. Welcome / Introduction**
- 2. Approval of the Agenda**
- 3. Conference issues**
- 4. Journal publication issues**
- 5. Special Interest Groups (SIGs) issues**
- 6. Standardization issues**
- 7. TCBD Awards**
- 8. Any other Business**
- 9. Next TCBD meeting**
- 10. Adjourn**

## Officers (1)



Jie Li, Chair (Global and Asia Pacific)

Professor

Shanghai Jiao Tong University

China



Jinsong Wu, Vice-Chair (Latin America)

Professor

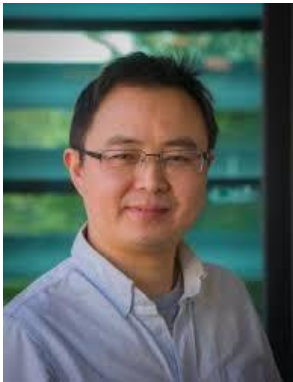
University of Chile

Chile

## Officers (2)



Periklis Chatzimisios, Vice-Chair  
(Europe), Professor  
Alexander TEI of Thessaloniki, Greece



Shui Yu, Vice-Chair (Oceania)  
Professor  
University of Technology Sydney, Australia

## Officers (3)

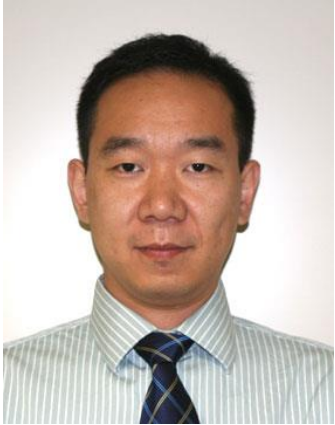


Kwang-Cheng Chen, Vice-Chair (Asia-Pacific) Professor  
University of South Florida, USA



Mahmoud Daneshmand, Vice-Chair  
(North America) Professor  
Stevens Institute of Technology, USA

## Officers (4)



Song Guo, Secretary  
Professor  
The Hong Kong Polytechnic University  
Hong Kong



Zhi Liu, Web Chair  
Professor  
Shizuoka University  
Japan

## Officers (6)



Nelson Fonseca, Advisor  
Professor  
The State University of Campinas,  
Campinas - Brazil



Chi-Ming Chen  
Industrial Liaison  
AT&T Labs, USA

## Officers (7)



Kathy Grise

IEEE Big Data Initiative Liaison

Future Directions

IEEE Technical Activities, USA



Wo Chang,

Standard Liaisons

NIST (National Institute of  
Standards and Technology), USA



# Activities in ComSoc Sponsored Major Conferences - Big Data Track Organization

- IEEE ICC 2020 Big Data Track in SAC Symposium
- IEEE GC 2019 Big Data Track in SAC Symposium
- IEEE ICC 2019 Big Data Track in SAC Symposium
- IEEE GC 2018 Big Data Track in SAC Symposium
- IEEE ICC 2018 Big Data Track in SAC Symposium
- IEEE GC 2017 Big Data Track in SAC Symposium
- IEEE ICC 2017 Big Data Track in SAC Symposium
- IEEE GC 2016 Big Data Track in SAC Symposium

# Activities in ComSoc Sponsored Major Conferences - Workshop Organization

- IEEE INFOCOM 2020 ICCN (Intelligent Cloud Computing and Network) workshop
- IEEE GlobeCom Workshop on Computational Intelligence and Big Data Towards Trustworthy IoT, Dec. 2019.
- IEEE GlobeCom 2019 workshop on Intelligent and Cognitive Space, Terrestrial and Ocean Internet, Systems and Applications (IEEE GlobeCom ICSTO)
- IEEE ICC 2019 First International Workshop on Data Driven Intelligence for Networks and Systems (DDINS)

## Activities in ComSoc Sponsored

### Major Conferences - Workshop Organization

- IEEE INFOCOM 2019 The First International Workshop on Intelligent Cloud Computing and Networking (ICCN)
- IEEE/CIC International Conference on Communications Workshop on 5G Meets AI/ML: data-driven connectivity, computing and control, August 2019.
- The First International Workshop on Network Meets Intelligent Computations (NMIC) will be held with IEEE ICDCS 2019.
- The IEEE International on Knowledge Centric Networking, 2018, in conjunction with IEEE INFOCOM 2018. [w.ieee-bdsta.org/infocom2016/](http://w.ieee-bdsta.org/infocom2016/)

## Activities in ComSoc Sponsored

### Major Conferences - Workshop Organization

- The IEEE Fourth International Workshop on Security and Privacy in Big Data (BigSecurity ) 2016, 2017, in conjunction with IEEE INFOCOM 2016, 2017.
- IEEE Big Data Sciences, Technologies, and Applications (BDSTA), co-located with IEEE INFOCOM 2016 10-15 APRIL 2016, SAN FRANCISCO, CA, USA, <http://www.ieee-bdsta.org/infocom2016/>

## Activities in ComSoc Sponsored Major Conferences - Workshop Organization

- The first IEEE International Workshop on Green Standardizations for ICT and Relevant Technologies (GSICT) in conjunction with IEEE GlobeCom 2015
- The first IEEE International Workshop on Green Standardizations for ICT and Relevant Technologies (GSICT) in conjunction with IEEE GlobeCom 2015
- The fourth IEEE International Workshop on Cloud Computing Systems, Networks, and Applications (CCSNA) in conjunction with IEEE GlobeCom 2015

## Activities in ComSoc Sponsored Major Conferences - Industry Panel Organization

- IEEE ICC 2017 Industry Panel P04. Big Data Analytics for Smart and Connected Health
- IEEE GlobeCom 2015 Industry Panel IF17: Big Data for Information and Communications Technologies

## Activities in ComSoc Sponsored Major Conferences

### - TSC Big Data (TSCBD) Meetings

- IEEE Globecom 2016 TSCBD meeting, December 6, 2016, Washington DC. USA.
- IEEE ICC 2016 TSCBD meeting, May 26, 2016, Kuala Lumpur, Malaysia.
- IEEE GlobeCom 2015 TSCBD meeting, December 8, 2015, San Diego, CA, USA.
- IEEE ICC 2015 TSCBD meeting, June 9, 2015, London, UK.

# Activities in Technically Co-Sponsored Symposia/Workshops Organization

- IEEE ICDCS 2019 NMIC (Network Meets Intelligent Computations) workshop
- EURASIP Journal on Wireless Communications and Networking Special Issue on Evolutional Trends of Intelligent IoT in 5G Era
- IEEE Transactions on Network Science and Engineering Special Issue on Smart Systems and Intelligent Networking Powered with Big Data Analytics
- IEEE Infocom 2020 DDINS (Data Driven Intelligence for Networks and Systems) workshop



# Activities in Technically Co-Sponsored Symposia/Workshops Organization

- International Conference on Cyber-Enabled Distributed Computing and Knowledge Discovery (CyberC-2017), Najing, China , Oct. 2017.
- International Symposium on Big Data and Networking , Aizu-Wakamatsu, Japan, Feb 16-18, 2016.
- EAI International Conference on Big Data and Cyber-Physical-Social Computing, October 15-17, 2016, Nagasaki, Japan.
- 2016 IEEE International Conference on Smart Data, Dec. 2016.
- 2016 International Workshop on Data Science and Engineering (DSE) in conjunction with the International Conference on Parallel Processing (ICPP 2016).

# Activities in Technically Co-Sponsored Symposia/Workshops Organization

- IEEE International Conference on Big Data Intelligence and Computing (IEEE DataCom 2018), Athena, Greece, August 6-10, 2018.
- IEEE International Conference on Big Data Intelligence and Computing (IEEE DataCom 2017), Florida USA, November 6-10, 2017.
- IEEE International Conference on Big Data Intelligence and Computing (IEEE DataCom 2016), Auckland, New Zealand, August 8-12, 2016. <http://grid.chu.edu.tw/datacom2016>
- Social Networks and Big Data Symposium, IEEE/CIC International Conference on Communications, 27-29 July 2016, Chengdu, China <http://iccc2016.ieee-iccc.org//>

# Activities in Technically Co-Sponsored Symposia/Workshops

- Invited Keynote Speaker, "Global Green Challenges Meet Information and Communication Technologies as well as Big Data", International Conference on Advancement of Computer Communication & Electrical Technology (ACCET), October 2016
- - Invited Keynote Speaker, "Global Green Challenges Meet Big Data Era", International Conference on Advances in Computing, Communications and Informatics (ICACCI), September 2016
- - Invited Keynote Speaker, "The Relevance of Green Revolution to Information and Communication Technologies as well as Big Data", IEEE Latin-American Conference on Communications, Arequipa, Peru, Nov. 2015

# Activities in Technically Co-Sponsored Symposia/Workshops

- Panelist, IEEE International Conference on Big Data Intelligence and Computing (IEEE DataCom), August 2016
- Keynote, IEEE DataCom, August 2016
- Keynote, IEEE International Conference on Sustainable Computing and Communications (IEEE SustainCom), December 2015

# Publication Activities

## - Supported Journal

- International Journal of Big Data Intelligence (IJBDI)
- IEEE Transactions on Big Data

# Publication Activities

## - Special Issues Organization

- IEEE Transactions on Intelligent Transportation Systems Special Issue on “Edge Intelligence for Internet of Vehicles”, 2020.
- International Journal of Distributed Sensor Networks Special Collection on Intelligent IoT - Artificial Intelligence for Future Internet of Things, 2020.
- Computing Special issue on Intelligence-driven Mobile Networks for Smart Cities, 2020.

# Publication Activities

## - Special Issues Organization

- 2020 Wiley Transactions on Emerging Telecommunications Technologies (ETT) Special Issue on Intelligent Cloud Computing and Networking
- 2020 IEEE Network Magazine Special Issue on Big Data Intelligent Networking
- IEEE Computational Intelligence Magazine Special Issue on “Computational Intelligence for Internet of Things in the Big Data Era (Part I),” Nov 2019. (in press)
- IEEE Computational Intelligence Magazine Special Issue on “Computational Intelligence for Internet of Things in the Big Data Era (Part II),” IEEE Computational Intelligence Magazine, Feb 2020. (in press)
- IEEE Transactions on Emerging Topics in Computational Intelligence Special Issue on "Big Data and Computational Intelligence for Agile Wireless IoT", (in press)

# Publication Activities

## - Special Issues Organization

- IEEE Trans. on Network Science and Engineering Special Issue - Big Data and Artificial Intelligence for Network Technologies, 2018
- IEEE Trans. on Big Data Special Issue - Wireless Big Data, 2017
- Journal of Digital Communications and Networks (Elsevier), Special Issue on Big Data Security and Privacy, 2017



# Publication Activities

## - Special Issues Organization

- Journal of Future Generation Computer Systems, Special Issue on Social Networking Big Data Opportunities, Solutions, and Challenges, 2016.
- IEEE Assess Special Section on Theoretical Foundations for Big Data Applications: Challenges and Opportunities, 2016
- IEEE Access Special Section on Big Data for Green Communications and Computing, 2016
- IEEE JSAC ETC Special Issue - Big Data Area, 2016
- IEEE Network Magazine Special Issue on Big Data for Networking, 2015

## Activities with IEEE-related chapters/societies

- Collaboration with **IEEE Big Data Initiative (BDI)** in Big Data Standardization and other related activities. 2014-2017
- Collaboration with **IEEE Big Data Community (BDC)**. 2018--

# SIGs (Special Interest Groups)

- Big Data for Cyber Security and Privacy
- Big Data with Computational Intelligence
- Big Data for Healthcare, Medicine and Biology
- Wireless Big Data
- **Others**

# TCBD Distinguished Technical Achievement Awards



For his outstanding technical leadership and achievement in big data and applications



*IEEE Communications Society  
Big Data Technical Committee*

*2020 Distinguished Technical Achievement Award*

*Presented to*

*Vincenzo Piuri*

For his outstanding technical leadership and achievement in big data and applications

*Vincent Chan*

Vincent Chan  
IEEE Communications Society, President

*Xuemin (Sherman) Shen*

Xuemin (Sherman) Shen  
VP Technical & Educational Activities

# TCBD Distinguished Technical Achievement Awards



For his outstanding  
technical leadership  
and achievement in  
big data and  
applications



*IEEE Communications Society  
Big Data Technical Committee*

*2020 Distinguished Technical Achievement Award*

*Presented to*

*Nirwan Ansari*

For his outstanding technical leadership and achievement in big data and applications

A handwritten signature in black ink that reads 'Vincent Chan'.

Vincent Chan  
IEEE Communications Society, President

A handwritten signature in black ink that reads 'Xuemin (Sherman) Shen'.

Xuemin (Sherman) Shen  
VP Technical & Educational Activities

# TCBD Best Journal Paper Award

- Sergio Salinas, Changqing Luo, Xuhui Chen, Weixian Liao, and Pan Li, “Efficient Secure Outsourcing of Large-scale Sparse Linear Systems of Equations,” IEEE Transactions on Big Data, Vol. 4, No. 1, pp. 26-39, January-March 2018.



# Other Issues

- **Best reading in Big Data**
- **News letter**
  
- **Call for researchers in charge of these issues**

# Web site and Membership

- Office web site
  - <http://www.comsoc.org/committees/technical-committee/big-data>
  - **Membership**
  - TCBD memberships give their members the opportunities:
    - To network with technical experts in related fields
    - To contribute to the activities in TCBD
    - To post messages to the TCBD mailing list



# Email List

- You must be an official member of TCBD (instead of just a subscriber of TCBD mailing list) in order to be able to send or post messages to the official TCBD mailing list: [tcbd@comsoc.org](mailto:tcbd@comsoc.org).
- To add yourself to or remove yourself from the TCBD mailing list, please go to <http://www.comsoc.org/committees/technical-committee/big-data>

# Research work on Big Data



# Next meeting

- IEEE GlobeCom 2020, Taipei, Taiwan, 7-11 December 2020

Comments?  
Suggestion?

Thank you for  
your participation