IEEE COMMUNICATIONS SOCIETY

Wireless Communications Technical Committee (WTC)

GC2020, Online Meeting
Tuesday 15 December
9:00 am-10:30am EDT

Current Officers:
Chair: Wei Zhang, UNSW Australia
Vice Chair: Bechir Hamdaoui, Oregon State Univ., USA
Secretary: Yue Gao, University of Surrey, UK
Before the meeting - Gentle Reminder

- Please **mute** your Mic if you do not want us to hear you.
- Please *raise hand* if you want to speak.
- Please sign in the meeting by type your “*name+affiliation+email*” in the message box. **See next page.**
- It is important to sign in the meeting, so you may keep your WTC membership active.
- The attendance record of past meetings is available at: [https://wtc.committees.comsoc.org/meeting-minutes/](https://wtc.committees.comsoc.org/meeting-minutes/)
Sign in

• Step 1: find and click “Chat” icon at the bottom of Zoom meeting interface

• Step 2: please write your information in the chat box:

  your name + affiliation + email

  Please enter here
Agenda

- Approval of the Agenda
- Approval of last WTC Meeting Minutes
- WTC: General Information and Mission Statement
- WTC Awards
- WTC Activities
- WTC Election Results
- Updates from TEAC & TC Board
  - ComSoc P&P update
- Emerging Technologies & SIG
- New Initiatives of ComSoc
- Discussion
- Adjourn
Minutes of WTC meeting held at ICC2020

Chaired by the WTC Chair: Wei Zhang
In Attendance: Wei Zhang (WTC Chair) Bechir Hamdaoui (WTC Vice-chair) Yue Gao (WTC Secretary), and WTC members (see the attendance list)
Meeting started at 9:00am (Time Zone: America/New_York), Friday July 3, 2020

1. Welcome and Introduction
   Chair initiated the WTC meeting. The meeting recorder was Yue Gao. The attendance was recorded on the Zoom chat box.

2. Approval of the Agenda (The Agenda was presented by Chair, moved by Sherman Shen and seconded by Mohsen Guizani. There were no objections, and no abstentions. The Agenda was unanimously approved)

3. Approval of GC 2019 meeting minutes. (The minutes was presented by the Chair, moved by Mohsen Guizani and seconded by Sherman Shen. There were no objections, and no abstentions. The Agenda was unanimously approved)

4. General introduction of WTC information and mission statement

5. WTC Award
   - Introduction of WTC Recognition Award
   - Introduction of WTC Outstanding Young Researcher Award
   - Call for Award Nomination to be announced later this year.

6. WTC activities
   - Update of WTC activities and conference endorsement
   - Nominations of symposium co-chairs of ICC and GC
   - So far, nominations are made up to ICC 2022
   - Endorsement of IEEE Fellows: 3 endorsement submitted in Feb 2020
   - Nominations for DL: Deadline of Nomination is September 2020
   - Update of Mailing list and website

7. WTC P&P updates: approved in Dec. 2019

8. WTC Emerging Technologies and New Initiatives
   - WTC’s support on SIG
     - Space, Air, Ground Integrated (SAGI) Communications
     - Intelligent Reflecting Surface Assisted (IRSA) Communications
     - Joint mmWave Radar and Communication
   - New Initiatives
     - ComSoc Virtual Distinguished Lecture program
     - ComSoc YouTube channel
     - IEEETV

9. Discussions
   How can we better serve our members in the COVID-19?
   - WTC Chair proposed to launch WTC Open Seminar.
   - Any other suggestions?
WTC - general information

- Website: http://wtc.committees.comsoc.org/
  - About 1,586 members in the list
  - Our members are encouraged to volunteer in professional activities

- Becoming WTC member
  - Open to all ComSoc members
  - Need to subscribe to WTC mailing list (Instructions are on WTC web page)

- Becoming active WTC member
  - Need to attend at least 2 of 5 prior WTC meetings.
  - See the attendance record at https://wtc.committees.comsoc.org/meeting-minutes/

- Mailing list: ieeewtc@comsoc.org
  - Can opt out of mass emails; just log onto system and click appropriate box
  - WTC Chair emails are sent to all members
    - Opting out of WTC Chair emails can only be done by terminating your membership; this can also be done through the web
WTC mission statement

The mission of WTC is to sponsor publications, conferences, technical sessions, workshops, and other information exchanges on architectures, applications, systems, terminals and technologies to provide wireless, mobile, location-independent communication and computing in voice, data and visual media. Its areas of interest include techniques for achieving portability, ubiquity and transparency using mobile and wireless networks ranging from physical layer, MAC layer, network layer to application layer. The committee also assumes the proactive duty to nominate suitable candidates for ComSoc and IEEE awards, propose distinguished lecturer candidates, and endorse deserving candidates for the election to IEEE Senior Member and Fellow grade, make contributions to standards in an organized form.
WTC Awards

- Two Awards
  - WTC Recognition Award
  - WTC Outstanding Young Researcher Award (est. 2019)

- WTC Award Committee (2019-2020)
  - Chair: Shuguang Cui (Past Chair of WTC)
  - 2nd Past WTC Chair (Tarik Taleb)
  - 3rd Past WTC Chair (Ross Murch)
  - A WTC member representing WTC membership(Angela Zhang)
  - A WTC member representing WTC membership (Junshan Zhang)
WTC Recognition Award
WTC Recognition Award
(Nomination deadline Oct. 2020)

◆ BASIS FOR JUDGING
  ▪ A person with a high degree of visibility and contribution in the field of "Wireless and Mobile Communications Theory, Systems, and Networks"

◆ PRESENTATION
  ▪ Annually (as appropriate).
  ▪ No more than two awards will be given per year.

◆ NOMINATION
  ▪ Solicited from the WTC members annually.
  ▪ Should include a (short) sentence for "what service or accomplishment" the person is nominated for and a one page supporting material.
  ▪ Additionally, two letters supporting the nomination may be sent to the WTC Award Committee Chair.
WTC Recognition Award – Past Recipients

- 2019 Prof. Sherman Shen, Univ of Waterloo, Canada; Prof. Jeff Andrews, UT Austin, USA
- 2018 Prof. Halim Yanikomeroglu, Carleton Univ., Canada; Prof. Robert Heath, UT Austin, USA
- 2017 Prof. Robert Schober, FAU, Germany; Prof. Mohsen Guizani, Univ. of Idaho, USA
- 2016 Prof. Junshan Zhang, ASU, USA; Prof. Mohamed-Slim Alouini, KAUST, Saudi Arabia
- 2015 Prof. Romano P. Fantacci, Florence University, Italy; Prof. Chengshan Xiao, Missouri Univ. of Science and Technology, USA
- 2014 Prof. Yuguang “Michael” Fang, University of Florida, USA; 2014 Prof. Gerhard P. Fettweis, Technische Universität Dresden, Germany
- 2013 Prof. Geoffrey Li, Georgia Institute of Technology, USA
- 2012 Prof. Zhi Ding, UC Davis, USA and Prof. Zygmun J. Haas, Cornell University, USA
- 2011 Prof. Kwang-Cheng Chen., National Taiwan Univ., and Prof. Khaled B. Letaief, HKUST, Hong Kang,
- 2010 Prof. Leonard J. Cimini Jr., University of Delaware, USA and Prof. H. Vincent Poor, Princeton University, USA
- 2009: Prof. Jerry Gibson, University of California, Santa Barbara, USA and Prof. Andrea Goldsmith, Stanford University, USA
- 2008: Prof. David Falconer, University of Carleton, Canada and Prof. Ted Rappaport, UT Austin, USA
- 2007: Prof. Lajos Hanzo, University of Southampton, UK and Prof. Gordon Stuber, Georgia Institute of Technology, USA
- 2006: Prof. Vijay Bhargava, University of British Columbia, Vancouver, Canada and Prof. Robert De Marca, CETUC, Pontifical Catholic Univ., Rio de Janeiro, BRAZIL
- 2005: Prof. Hamid Aghvami, King’s College, London, UK and Dr. Justin C-I Chuang, Broadcom, USA
- 2004: Prof. Steve Rappaport, State University of New York, USA
- 2003: Prof. Ramjee Prasad, University of Aalborg, Denmark
- 2002: Prof. Elvino S. Sousa, Univ. of Toronto, Canada & Prof. Imrich Chlamtac, Univ. of Texas at Dallas, USA
The IEEE Wireless Communications Technical Committee (WTC) is proud to present the 2020 WTC Recognition Award to

Professor Hamid Jafarkhani

for his exceptional research contributions to MIMO Wireless Communications

Wei Zhang
IEEE WTC Chair
December 2020

Shuguang Cui
WTC Award Committee Chair
December 2020
WTC Recognition Award Winner: Hamid Jafarkhani

Hamid Jafarkhani is a Chancellor's Professor at the Department of Electrical Engineering and Computer Science, University of California, Irvine, where he is also the Director of Center for Pervasive Communications and Computing, the Co-Director of Networked Systems Program, and the Conexant-Broadcom Endowed Chair. He is the 2020-2022 elected Faculty Chair of the UCI School of Engineering. He was a Visiting Scholar at Harvard University in 2015 and a Visiting Professor at California Institute of Technology in 2018. Among his awards are the NSF Career Award, the UCI Distinguished Mid-Career Faculty Award for Research, the School of Engineering Excellence in Research Senior Career Award, the IEEE Marconi Prize Paper Award in Wireless Communications, the IEEE Communications Society Award for Advances in Communication, and the IEEE Eric E. Sumner Award. Dr. Jafarkhani is listed as an ISI highly cited researcher. According to the Thomson Scientific, he is one of the top 10 most-cited researchers in the field of "computer science" during 1997-2007. He is the 2017 Innovation Hall of Fame Inductee at the University of Maryland's School of Engineering. He is a Fellow of AAAS, an IEEE Fellow, and the author of the book "Space-Time Coding: Theory and Practice."
The IEEE Wireless Communications Technical Committee (WTC) is proud to present the **2020 WTC Recognition Award** to

**Professor Rui Zhang**

for his exceptional research contributions to SWIPT, UAV communication, and IRS aided communication

Wei Zhang  
IEEE WTC Chair  
December 2020

Shuguang Cui  
WTC Award Committee Chair  
December 2020
WTC Recognition Award Winner: Rui Zhang

Rui Zhang (S'00-M'07-SM'15-F'17) received the B.Eng. (first-class Hons.) and M.Eng. degrees from National University of Singapore, Singapore, and the Ph.D. degree from Stanford University, Stanford, CA, USA, all in electrical engineering. He is now a Professor in the Department of Electrical and Computer Engineering, National University of Singapore. He has published about 230 journal papers and 190 conference papers. He has been listed as a Highly Cited Researcher by Thomson Reuters/Clarivate Analytics since 2015. His current research interests include UAV/satellite communications, wireless power transfer, reconfigurable MIMO, and optimization methods.

He was the recipient of the 6th IEEE Communications Society Asia-Pacific Region Best Young Researcher Award in 2011, and the Young Researcher Award of National University of Singapore in 2015. He received 9 IEEE best journal paper awards, including the IEEE Marconi Prize Paper Award in Wireless Communications in 2015 and 2020, the IEEE Communications Society Heinrich Hertz Prize Paper Award in 2017 and 2020, the IEEE Signal Processing Society Best Paper Award in 2016 and Donald G. Fink Overview Paper Award in 2017, etc. He served for over 30 international conferences as the TPC co-chair or an organizing committee member. He was an elected member of the IEEE Signal Processing Society SPCOM and SAM Technical Committees, and has served as the Co-/Vice-Chair of the IEEE Communications Society Asia-Pacific Board in various committees. He served as an Editor/Guest Editor for 5 IEEE journals, and now serves as an Editor for the IEEE Transactions on Communications. He serves as a member of the Steering Committee of the IEEE Wireless Communications Letters. He is a Distinguished Lecturer of IEEE Signal Processing Society and IEEE Communications Society.
WTC Outstanding Young Researcher Award
WTC Outstanding Young Researcher Award
(Nomination deadline Oct. 2020)

This award recognizes WTC members who have achieved early career visibility in the field through research and service to WTC.

No more than two awards will be given per year.

The nominee must:
- be an IEEE ComSoc Member and an active WTC member at the time of nomination (see P&P for “active WTC member”),
- have been involved significantly with research related to the areas of wireless communications, and
- be within 10 years since completion of Ph.D. at the time of nomination.
The IEEE WTC is proud to present the
2020 WTC Outstanding Young Researcher Award to

Professor Sheng Zhou

for his contributions to Green Wireless Communications

Wei Zhang  Shuguang Cui
IEEE WTC Chair  WTC Award Committee Chair
December 2020  December 2020
WTC Outstanding Young Researcher Award
Winner: Sheng Zhou

Sheng Zhou is an associate professor in Electronic Engineering Department at Tsinghua University, Beijing, China. He received his B.S. and Ph.D. degrees in Electronic Engineering from Tsinghua University, in 2005 and 2011, respectively. From January to June 2010, he was a visiting student at Wireless System Lab, Electrical Engineering Department, Stanford University. From November 2013 to January 2014, he was a visiting researcher in Central Research Lab of Hitachi Ltd., Japan. His research interests include cross-layer design for multiple antenna systems, cooperative transmission in cellular systems, vehicular networks, edge computing, and green wireless communications. He is serving as an associate editor for Journal of Communications and Information Networks, and a guest editor for IEEE Internet of Things Journal. He served as an associate editor for IEEE Wireless Communications Letters. He served as the publicity chair of IEEE ICCC’12, IEEE Online GreenComm’14 and IEEE ICC’16, the symposium/track co-chair of IEEE/CIC ICCC’15&’18, APCC’17, IEEE PIMRC’17, and IEEE Globecom’18, and etc. He is a co-recipient of the Best Paper Award from APCC in 2009 and 2013, IEEE WCSP 2013 and 2018, ITC in 2013, and IEEE ICC in 2020. He received the 2017 IEEE ComSoc Asia-Pacific Outstanding Young Researcher Award.
2\textsuperscript{nd} Reminder – sign in

Before you leave the meeting, please input your information in the Zoom chat box:

\textit{your name + affiliation + email}

Please enter:

\textit{your name + affiliation + email}
WTC Election Results
WTC Nomination and Election Committee

- Chair: Wei Zhang (Chair of WTC)
- Past WTC Chair (Shuguang Cui)
- 2\textsuperscript{nd} Past WTC Chair (Tarik Taleb)
- 3\textsuperscript{rd} Past WTC Chair (Ross Murch)
- A WTC member representing WTC membership (Junshan Zhang)
WTC Election Results

Chair candidates:
- Bechir Hamdaoui: 48 Votes (elected)
- Rui Zhang: 46 Votes

Vice Chair candidates:
- Wenchi Cheng: 4 Votes
- Yue Gao: 89 Votes (elected)

Secretary candidates:
- Jie Xu: 63 Votes (elected)
- Yong Zeng: 27 Votes
WTC Activities

Endorsement of Conferences for ComSoc technical co-sponsorship
- Conference should be relevant to WTC
- At least three WTC members should be involved in the conference TPC
- Conference shall enjoy a good reputation among the community
- WTC endorses a number of conferences every year

Nomination for Symposium Co-Chairs of ICC and Globecom
- Nominations have already been made up to GC 2022
- Let us know if you are interested in participating in the future

Endorsement of IEEE Fellowship
- 3 endorsements were made in Feb 2020.

Nomination for ComSoc Distinguished Lecturers
- 4 nominated and 3 approved.
1) B.5.6.4.4.d Nomination and Election Subcommittee:

- For each elected office, there must be at least two candidates on the ballot. If there are not enough nominations, the TC N&E Subcommittee shall identify additional candidates. Only TC voting members are eligible to run as elected TC Officer.

- After each election, the Nomination and Election Subcommittee Chair shall prepare an Election Report that shall include:
  - A verbatim excerpt of the election process specified in the P&Ps, including how the Nomination and Appointment Subcommittee members are selected.
  - When and where the election took place.
  - The roster of the Nominations and Elections Committee.
  - The candidates for each office and how the candidates were selected for the ballot.
  - The IEEE member number for each candidate, with a confirmation that they satisfy the criteria for being a Technical Committee member.
  - The method chose for voting (in person, electronically, by teleconference, etc.).
  - The list of members who voted in the election with a confirmation that they all satisfy the criteria for being a Technical Committee voting member.
  - Name of the person preparing the ballot. 📊 The actual vote tally by candidate.
Emerging Technologies

SIG established
- Space Air Ground Integrated (SAGI)
- Reconfigurable Intelligent Surfaces for Smart Radio Environments (RISE)
- Integrated Sensing and Communication (ISAC)
- Rate-Splitting Multiple Access

WTC’s support on SIG
- Technically (co-)sponsor Workshop/Symposium
- Organize special issue in Journals
- Promote seminars/talks
SIG on RISE

- **Officers**
  - Chair – Marco Di Renzo, CNRS & Paris-Saclay University, France
  - Vice-Chair – Yuanwei Liu, Queen Mary University of London, UK
  - Vice-Chair – Chau Yuen, Singapore University Technology & Design, Singapore
  - Secretary – Alexis Aravanis, CentraleSupelec, France

- **Website & Mailing List**
  - https://sites.google.com/view/ieee-comsoc-wtc-sig-rise-- ieee.comsoc.wtc.sig.rise@gmail.com

- **Best Readings**

- **Workshops (2020, 2021)**
  - GLOBECOM 2020 (Reconfigurable Intelligent Surfaces for Wireless Communication for Beyond 5G)
  - ICC 2021 (Workshop on Reconfigurable Intelligent Surfaces for Future Wireless Communications)
  - WCNC 2021 (Workshop on Reconfigurable Intelligent Surfaces for 5G and Beyond)

- **Special Issues (2020, 2021)**
  - IEEE JSAC 2020 (Wireless Networks Empowered by Reconfigurable Intelligent Surfaces)
  - IEEE TCCN 2021 (Intelligent Surfaces for Smart Wireless Communications)
  - IEEE WCM 2021 (Intelligent Surfaces for 5G and Beyond)
  - IEEE COMMAG 2021 – Joint with ETI on RISs (Reconfigurable Intelligent Surfaces: Design and Implementation)

- **Plans for 2021**
  - Multidisciplinary workshops/panels @ ICC and GLOBECOM
  - Multidisciplinary special issues @ IEEE journals
  - Liaison with Emerging Technology Initiative (ETI) on Reconfigurable Intelligent Surfaces
SIG on ISAC

❖ Officers
  - Chair: Jie Xu, The Chinese University of Hong Kong, Shenzhen, China (Email: xujie@cuhk.edu.cn)
  - Vice-Chair: Tony Xiao Han, Huawei Technologies Co., Ltd., China
  - Vice-Chair: Christos Masouros, University College London, UK

❖ Website
  - https://sites.google.com/site/wtcsigisac/

❖ Workshops and Special Sessions
  - IEEE ICC 2020 Workshop on Communication and Radar Spectrum Sharing (CRSS)
  - IEEE Globecom 2020 Workshop on Integrated Sensing and Communication (ISAC)
  - IEEE WCNC 2021 Workshop on Integrated Sensing (Radar) and Communication: From Spectrum Sharing to Joint Transmission
  - IEEE ICASSP 2021 Special Session on Intelligent Sensing and Communications

❖ Special Issues
  - IEEE JSTSP Special Issue on Joint Communication and Radar Sensing for Emerging Applications
  - IEEE JSAC Special Issue on Integrated Sensing and Communication

❖ Tutorials

❖ Industrial Efforts
  - IEEE P802.11 - WLAN SENSING (SENS) Study/Task Group

❖ Plans for 2021
  - Workshops, special sessions, and tutorials at ICC, Globecom, etc.
  - Special issues at IEEE Journals
SIG on SAGI

• **Officers**
  - Chair – Lin Bai, Beihang University, China
  - Vice-Chair – Chunxiao Jiang, Tsinghua University, China
  - Secretary – Lin Zhou, Beihang University, China

• **Website & Mailing List**
  - https://sites.google.com/view/sagic/sagic & ieee.comsoc.wtc.sig.sagi@gmail.com

• **Best Readings**
  - https://sites.google.com/view/sagic/sagic/best-readings

• **Workshops (2020, 2021)**
  - GLOBECOM 2020 (Workshop on Space-Ground Integrated Networks)
  - ICC 2020 (Workshop on Integrating UAVS into 5G and Beyond)
  - WCNC 2021 (Workshop on Internet of Integrated Space-Terrestrial Intelligent Systems and Applications)

• **Special Issues (2020, 2021)**
  - IEEE JSAC (Special issue on UAV Communications in 5G and Beyond Networks)
  - IEEE Network (Special issue on Ubiquitous IoT with integrated Space, Air, Ground, and Ocean Networks)
  - IEEE Wireless Communications (Special issue on Service-Oriented Space-Air-Ground Integrated Networks)

• **Tutorials, panels, etc (2020)**
  - ICC 2020 (Tutorial on Aerial Access Networks for 6G: From UAV, HAP, to Satellite Communication Networks)

• **Plans for 2021**
  - Tutorial submissions to conferences in 2021 (e.g., ICC, GLOBECOM, VTC, WCNC, PIMRC)
  - Multidisciplinary workshops/panels @ ICC, GLOBECOM, VTC, WCNC, PIMRC
  - Multidisciplinary special issues @ IEEE Journals
New Initiatives

WTC Online Seminars
https://wtc.committees.comsoc.org/seminars/

ComSoc Virtual Distinguished Lecture program
https://www.comsoc.org/membership/distinguished-lecturers

ComSoc YouTube channel
https://www.youtube.com/user/IEEEComSoc

IEEETV https://ieeetv.ieee.org/channels/communications
Discussion

Suggestions?
Last Reminder – sign in

Before you leave the meeting, please check if you have input your information in the Zoom chat box:

*your name + affiliation + email*

Please enter: your name + affiliation + email
Thank You!

Next WTC meeting will be held at ICC 2021