IEEE Communications Society (ComSoc) Internet of Things, Ad Hoc and Sensor Networks Technical Committee (IoT-AHSN TC)

IoT-AHSN TC Meeting at IEEE GC 2022

Chair: Jiajia Liu

Vice Chair: Sharief Oteafy

Secretary: Shuai Han

Wednesday Nov. 23, 2022 · 9am – 11am (Eastern Time - New York)

Virtual Meeting

Zoom Meeting ID: 92903592416 Passcode: 359648

Agenda

- Welcome and introduction
- Approval of the agenda and the minutes of the last IoT-AHSN TC meeting
- IoT-AHSN TC 2022 Technical Achievements Award
- Introduction to the IoT-AHSN TC
- IoT-AHSN TC Newsletters
- Standard Liaison Report
- Industry Seminar series
- Update on IoT-AHSN TC activities in conferences/symposia
- Update on IoT SIG activities
- Other businesses
- Next IoT-AHSN TC meeting
- Meeting adjournment

Minutes of IoT-AHSN TC meeting post ICC'22 (posted on IoT-AHSN TC website)

1. Welcome and introduction
2. Approval of the agenda and the minutes of the last IoT-AHSN TC meeting
3. Introduction to the IoT-AHSN TC
4. IoT-AHSN TC Newsletters
5. Standard Liaison Report
6. Industry Seminar series
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9. Other businesses
10. Next IoT-AHSN TC meeting
11. Meeting adjournment

IoT-AHSN Committee Awards

IoT-AHSN Technical Achievement Award

The award recognizes members of the IEEE Communications Society (ComSoc) who have made **significant contributions** to technological advancement of IoT-ad hoc and sensor networks.

IoT-AHSN Committee Awards

Awards Subcommittee (2022-2023)

Subcommittee Chair: Soumaya Cherkaoui (Past TC Chair)
Subcommittee member: Hossam Hassanein (Past Chair)
Subcommittee member: Nirwan Ansari (Past Chair)
Subcommittee Member: Hussein Mouftah (Award Recipient)
Subcommittee Member: Shuai Han (TC Secretary)

IoT-AHSN Committee Awards

2022 IoT-AHSN TC Technical Achievement Award

Criteria:
- A person with a high degree contributions and accomplishments in the field of "IoT-AHSN"

Award Frequency:
- Annually (as appropriate)

Nomination:
- Solicited from the IoT-AHSN members annually by the IoT-AHSN Awards Subcommittee
- Should include a mention for what contributions or accomplishment the person is nominated for and a supporting material
- Should include support letters
- Deadline: September 9th, 2022

2022 IoT-AHSN TC Technical Achievement Award
Prof. Albert Zomaya
The University of Sydney, Australia

For his achievements and contributions to IoT-edge networking, internet of things, and sensor networks

Introduction to the IoT-AHSN TC

- ## Purpose

The IoT-AHSN TC will serve as ComSoc's focal point in the areas of the Internet of Things (IoT), ad hoc and sensor networks, and wireless networking technologies, stimulating and organizing leading-edge IoT, ad hoc and sensor networks, and wireless networking symposia, workshops, sessions and tutorials at ComSoc conferences. It will also serve as a proactive facilitator in the dissemination of evolving IoT, ad hoc and sensor networking, and wireless networking standards.

- ## Area of interest

Areas of interest include systems and algorithmic aspects of sensor and ad hoc networks, networking protocols and architecture, embedded systems, middle-ware and information management, novel applications, flow control and admission control algorithms, network security, reliability, and management.

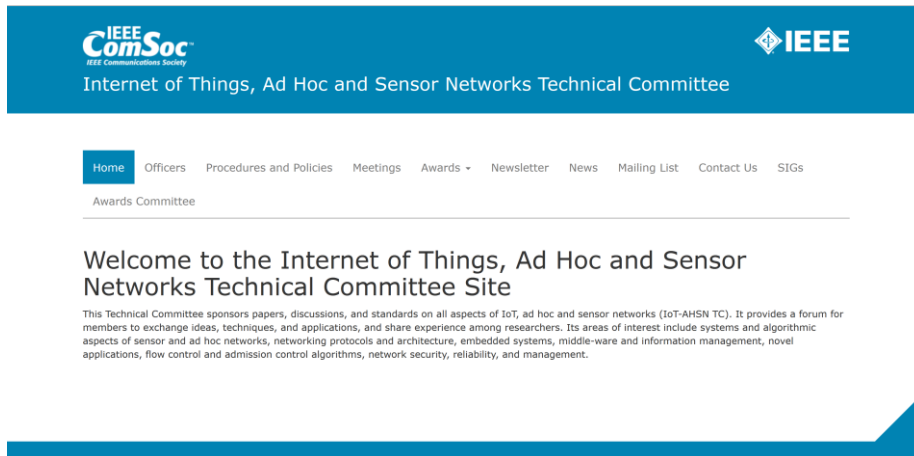# Introduction to the IoT-AHSN TC

- **Website**

The website of the TC：

https://ahsn.committees.comsoc.org

- **Mailing List**

The mailing list of the TC:

ahsn@COMSOC.ORG

Introduction to the IoT-AHSN TC

- **Membership of IoT-AHSN TC**
  - Open to all **ComSoc members**
  - Need to **subscribe to IoT-AHSN TC mailing list**
  - Note: **signing presence** doesn't **make you a member**
  - **Currently 660+ subscribers**

- **Active Membership of IoT-AHSN TC**
  - Need to attend at least **2 of 5 prior IoT-AHSN TC meetings.**
  - It is important to register **your name and email address** when you attend.

Introduction to the IoT-AHSN TC

- ## Mailing List

  – Please add your name to the subscription at **ahsn@COMSOC.ORG**

  – **This is important to verify your ComSoc Membership**

Reminder to take 1 min register in the google forms

https://docs.google.com/forms/d/e/1FAIpQLScxXy4V-6YNtrwAdKJIe2Jd5JBZK91V6dBAkqBTYBRyuHyu3g/viewform?usp=pp_url
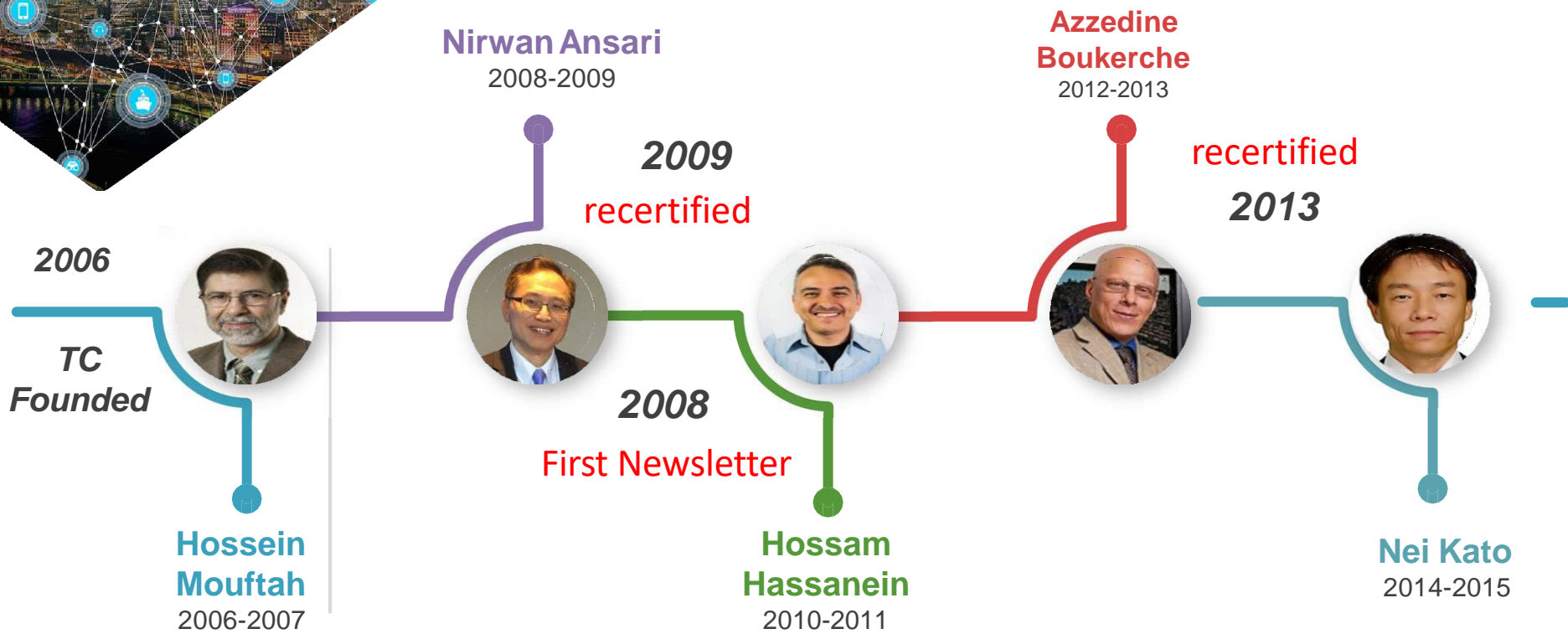
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IoT-AHSN TC Meeting at IEEE GC 2022 attendance

Please enter your information only once.

hanshuai.net@gmail.com (not shared) Switch accounts

*Required

History of the IoT-AHSN TC

Nirwan Ansari
2008-2009

2009
recertified

2006

TC
Founded

Hossein Mouftah
2006-2007

2008
First Newsletter

Hossam Hassanein
2010-2011

Azzedine Boukerche
2012-2013

recertified
2013

Nei Kato
2014-2015

History of the IoT-AHSN TC

Cheng Li
2018-2019

Jiajia Liu
2022-2023

Sharief Oteafy
TC Vice Chair
2022-2023

2016

recertified

2020
New P&P

recertified

New TC Name

2022

recertified

Shuai Han
TC Secretary
2022-2023

Jalel Ben Othman
2016-2017

Soumaya Cherkaoui
2020-2021

Current Officers

TC Officers (2022-2023)
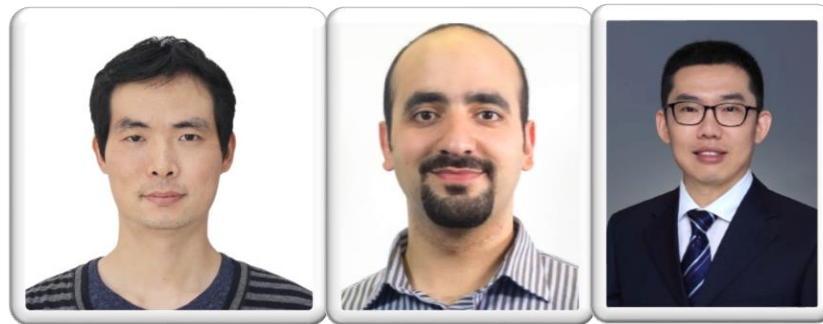
- **TC Chair:** Jiajia Liu, liujiajia@nwpu.edu.cn
- **TC Vice Chair:** Sharief Oteafy, soteafy@depaul.edu
- **TC Secretary:** Shuai Han, hanshuai@hit.edu.cn
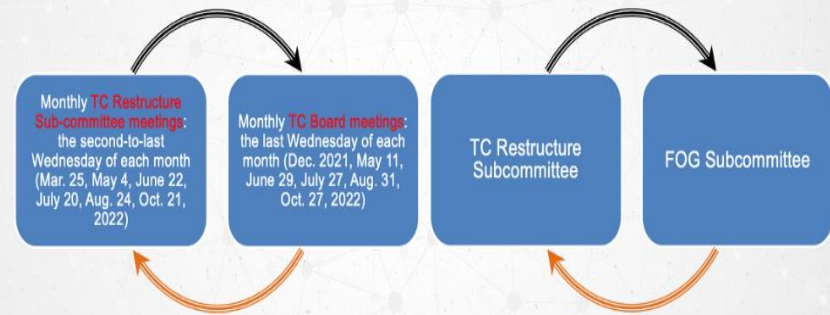
TC Restructure (update & draft)

Why Should We Restructure the TCs?

- Lack of industry participation
- Lack of diversity in YP & Students members
- Lack of coordination to form SIGs
- Lack of support for local chapters globally
- Lack of support for standard development
- Lack of educational services to members
- Lack of guidelines in creating TC awards
- Significant overlapping areas among some TCs

What we've done in 2022?

Iterative Procedure

▸ Iterative procedure to involve TCs/ICs in the process:

Monthly TC Restructure Sub-committee meetings: the second-to-last Wednesday of each month (Mar. 25, May 4, June 22, July 20, Aug. 24, Oct. 21, 2022)

Monthly TC Board meetings: the last Wednesday of each month (Dec. 2021, May 11, June 29, July 27, Aug. 31, Oct. 27, 2022)

TC Restructure Subcommittee

FOG Subcommittee

All meeting docs and slides are available at:
https://tc.boards.comsoc.org/meeting-documents/

Your feedback is very important to us!

Please send your comments to
Shiwen Mao, TC Board Director, E-mail: smao@ieee.org
Wei Zhang, VP TEA, E-mail: weizhang@ieee.org

IoT-AHSN TC Newsletter

- ## Newsletter Editor-In Chief:
  - **Qiang Ye (Dalhousie University, Canada) qye@cs.dal.ca**
    Appointed as EiC of the IoT-AHSN Newsletter for the 2021-2023 term.

- ## Newsletter Co-Editors:
  - **Moez Esseghir (University of Technology of Troyes, France)**
  - **Lu Lv (Xidian University, China)**

IoT-AHSN TC Newsletter- Current Newsletter

- Version 16 is now posted on our web page:

https:/ /ahsn.committees.comsoc.org/newsletter/

- 1 article published in Vol. 1, No. 16

1. Cody Repass, Shamin Khan and Lixin Wang, "*Applications of Internet of Things in the Medical Field* "

IoT-AHSN TC Newsletter- Call for Contribution

- Theme of issue: Internet of Vehicles

- The topics of interest include, but are not limited to:

  - Data Collection in Internet of Vehicles

  - Energy Efficiency in Internet of Vehicles

  - Task Offloading in Internet of Vehicles

  - Resource Allocation in Internet of Vehicles

  - Localization in Internet of Vehicles

  - Security in Internet of Vehicles

  - Privacy Preservation in Internet of Vehicles

- **Deadline: 12/31/2022**

Contact: Qiang Ye, Moez Esseghir, or Lu Lv

Standards Liaison Report

Standard Liaison: Rodolfo Coutinho
Concordia University
(Canada)
(2022-2023)
rodolfo.coutinho@concordia.ca

Standards Liaison Report

- Representing IoT-AHSN in the following meetings/activities:
    - IEEE ComSoc Standardization Program Development Board (SPDB)
    - IEEE ComSoc Standard Development Board (SBD)
    - Follow the activities/advancements of current IEEE working groups that are working on the areas related to those covered by our committee

Standards Liaison Report

- COM/SDB: https://comsdb.standards.comsoc.org

- 5 meetings since last report
- Updates in the board webpage (WG and Projects)
- PAR from Channel Propagation Modeling Ad Hoc Group
- Standard for Metaverse: Terminology, Definitions, and Taxonomy
- Awareness to standardization

Industry Seminar Series

Industry Liaison: Anwar Haque
Western University (Canada)
(2021-2022)
ahaque32@uwo.ca

Industry Seminar Series

- **Activities**

Industry invited seminars

Plan to invite speakers every 3 months from Jan. 2023

Update on IoT-AHSN TC Activities

1. Endorsement of Conferences for ComSoc Technical Co-Sponsorship

- Conference should :
  - be relevant to TC committee activities
  - Have at least three TC members involved in the TPC
  - Enjoy a good reputation among the community

- When the conference is endorsed, **report on submissions, review process, etc, shall be sent to the TC for follow up**

Update on IoT-AHSN TC Activities

1. Endorsement of Conferences for ComSoc Technical Co-Sponsorship

For 2022 the TC endorsed
- **Wincom 2022**
- **ICCSN 2022**
- **IWCMC 2023**

Wincom 2022

General Chair

– Abdellatif Kobbane, ENSIAS, Mohammed V University in Rabat

General Co-Chair

– Jalel Ben-Othman, Paris 13 University, France

Technical Program Committee Chairs

– Shuai Han, Harbin Institute of Technology, China

– Ahmed Drissi El Maliani, Faculty of Science, Mohammed V University in Rabat, Morocco

– Luca Foschini, Scuola Superiore Sant'Anna, Italy

Wincom 2022

- **Statistics: 38 accepted papers**

- 1 Best paper award

- 1 Best Student paper Award

- 10 Demo-Innovation projects (Demo-IP)

- 2 Best Demo-IP

- 4 Keynotes speakers

- 4 Industrial keynotes

- 1 special session

- 130 participants

ICCSN 2022

General Chair

- Tan Xiaoheng, Executive Vice Dean, School of Microelectronics and Communication Engineering, Chongqing University, China
- Jalel Ben-Othman, University of Paris 13, France
- Wei Wu, The 54th Research Institute of China Electronics Technology Group Corporation, China

General Co-Chair

- Shum Ping, Southern University of Science and Technology, China
- Xiaoping Zeng, Chongqing University, China
- Ruyan Wang, Chongqing University of Posts and Telecommunications, China

Technical Program Committee Chairs

- Yunjian Jia, Chongqing University, China
- Shuanghua Yang, Southern University of Science and Technology, China
- Nobuo Funabiki, Okayama University, Japan
- Rong Shi, Science and Technology on Electronic Information Control Laboratory, China

Statistics

- Total number of submissions = 68
- Total number of accepted papers = 35

IWCMC 2023

General Chair

– Dr. Bo Rong, Communications Research Centre, Canada

General Co-Chair

– Dr. Mohamed Essaaidi, ENSIAS, Morocco

– Dr. Jiajia Lu, Northwestern Polytechnical University, China

Executive Chairs

– Dr. Xiao Wang, University of Alabama, USA

– Dr. Bechir Hamdaoui, Oregon State University, USA

Executive Vice Chairs:

– Dr. Shuai Han, Harbin Institute of Technology, China

– Dr. Abdellatif Kobbane, Mohammed V University in Rabat, Morocco

Technical Program Committee Chairs

– Dr. Mohamed Adel Serhani, UAE University, UAE

– Dr. Jalel Ben-Othman, University of Paris 13, France

Deadline: 10 January 2023

Update on IoT-AHSN TC Activities

2. GC/ICC Technical Symposia Sponsorship

☐ **IoT & Sensor Networks (IoT-SN)**

☐ **Mobile and Wireless Networks (MWN)**

☐ **Next-Generation Networking & Internet(NGNI)**

☐ **Wireless Communications Symposium(WC)**

- ICC 2023: Rome, Italy

- GC 2023: Kuala Lumpur, Malaysia

- ICC 2024: Denver, USA

- GC 2024: Cape Town, South Africa

- ICC 2025: Montreal, Canada

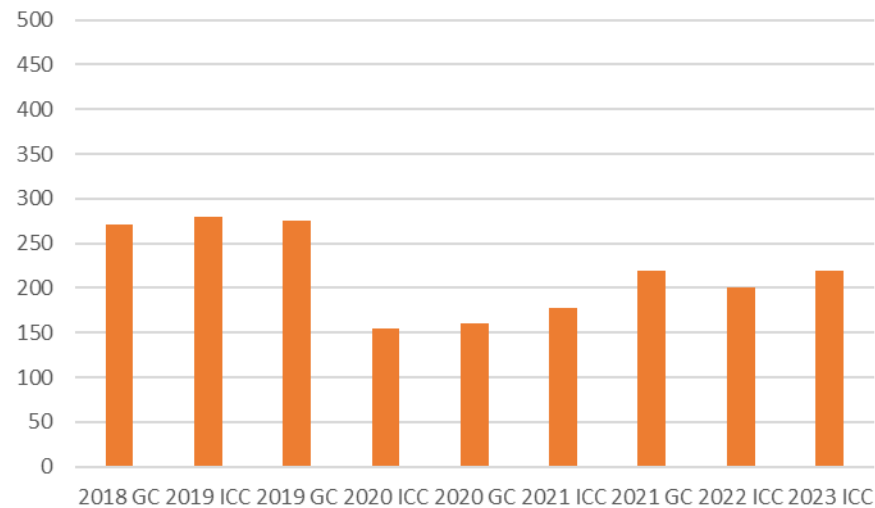- GC 2025: Taipei, Taiwan

Update on IoT-AHSN TC Activities

2. GC/ICC Technical Symposia Sponsorship
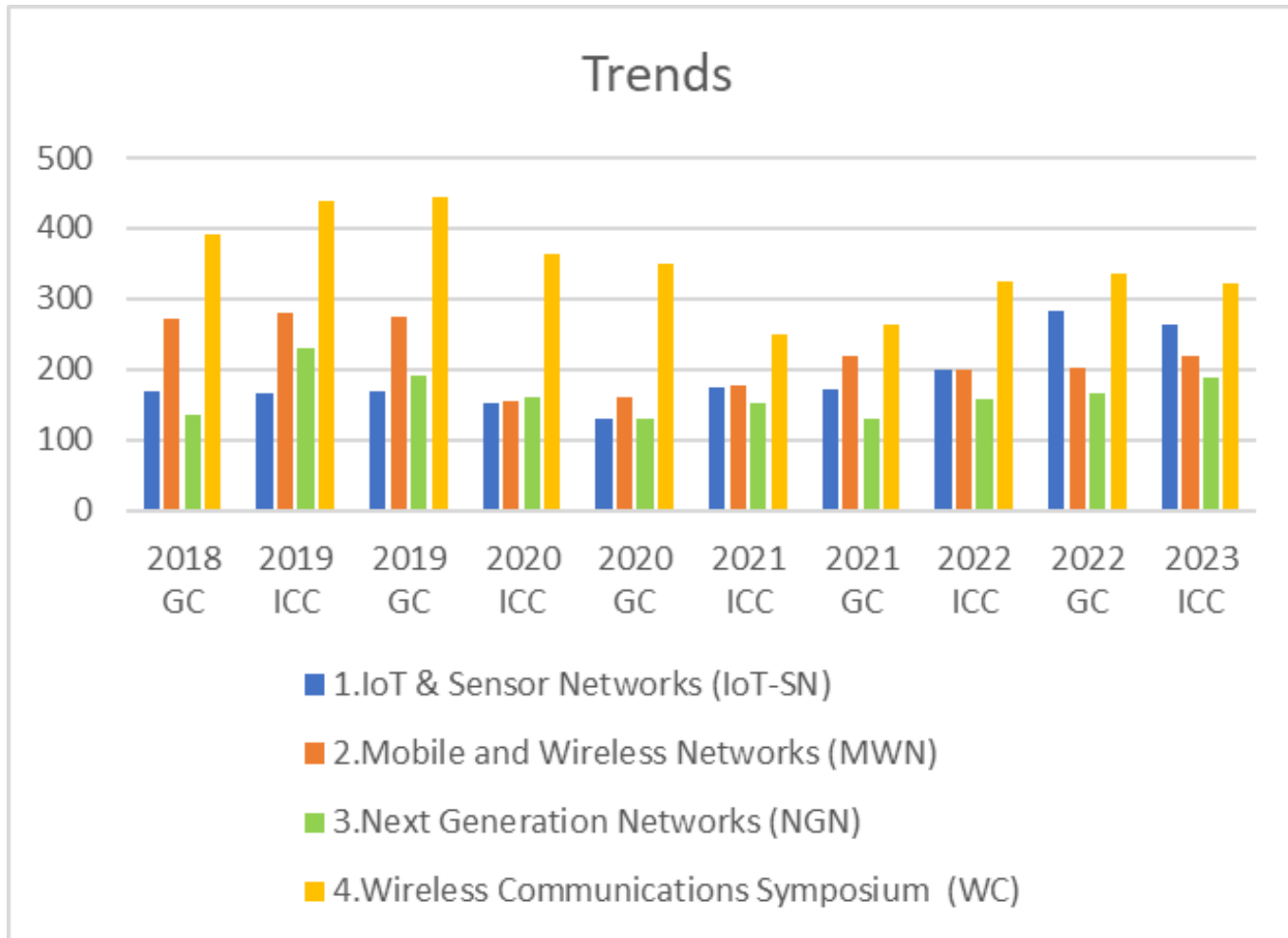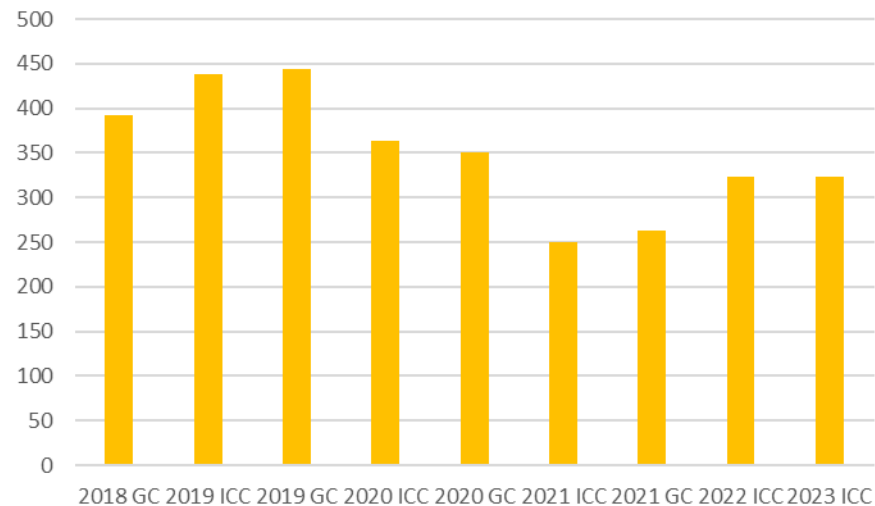
1.IoT & Sensor Networks (IoT-SN)
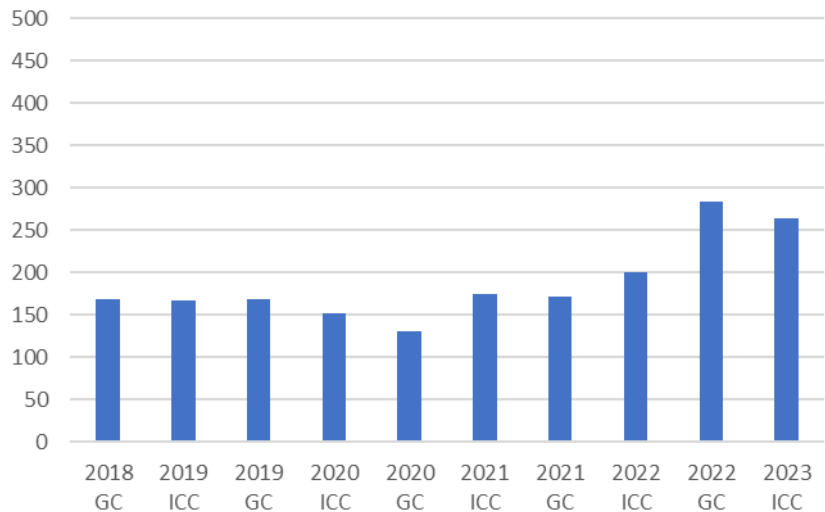
2.Mobile and Wireless Networks (MWN)

3.Next Generation Networks (NGN)
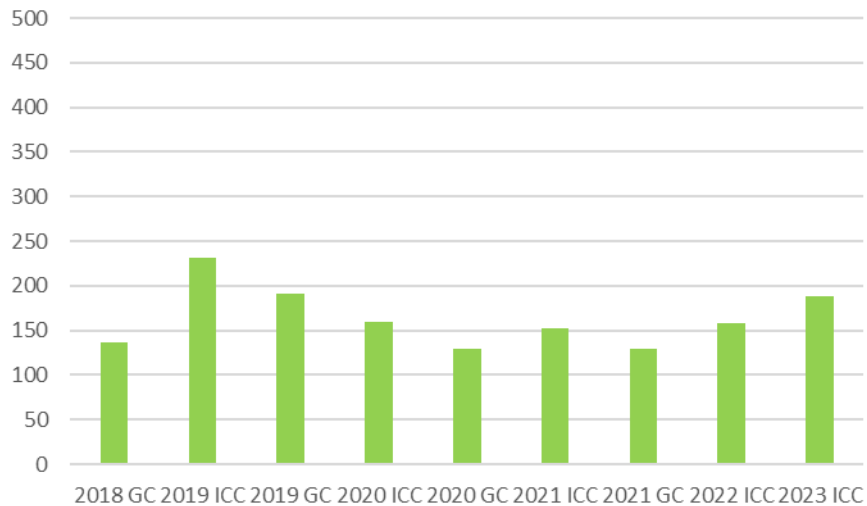
4.Wireless Communications Symposium (WC)

IoT & Sensor Networks (IoT-AHSN)
IEEE GC 2022

- ### Co-Chairs

  - *Nidal Naser, Alfaisal University, Saudi Arabia*

  - *Walaa Hamouda, Concordia University, Canada*

  - *Moayad Aloqaily, xAnanlytics Inc., Canada*

  - *Berk Canberk, Istanbul Technical University, Turkey*

- ### Statistics

  - *Total number of submissions = 284 (a breaking)*

  - *Total number of accepted papers = 113*

  - *Acceptance ratio = 39.7*

  - *TPC members = 386*

Mobile and Wireless Networks (MWN)
IEEE GC 2022

◈ **Co-Chairs**

- ◈ *Vojislav Misic, York University, Canada*
- ◈ *Miao Pan, University of Houston, USA*
- ◈ *Linglong Dai, Tsinghua University, China*
- ◈ *Yun Lin, Harbin Engineering University, China*

◈ **Statistics**

- ◈ *Total number of submissions = 202*
- ◈ *Total number of accepted papers = 81*
- ◈ *Acceptance ratio = 0.4*
- ◈ *TPC members = 253*

Next-Generation Networking & Internet(NGNI)
IEEE GC 2022

◈ **Co-Chairs**

- *Lotfi Mhamdi, University of Leeds, UK*

- *Qi Li, Tsinghua Univesity, China*

- *Selma Boumerdassi, Conservatoire National Des Arts et Métiers (CNAM), France*

◈ **Statistics**

- *Total number of submissions = 166*

- *Total number of accepted papers = 64*

- *Acceptance ratio = 39.2*

- *TPC members = 246*

Wireless Communications Symposium(WC)
IEEE GC 2022

- ◈ **Co-Chairs**
  - ◈ *Melike Erol-Kantarci, University of Ottawa, Canada*
  - ◈ *Haixia Zhang, Shandong University, China*
  - ◈ *Theodoros Tsiftsis, Jinan University, China*
  - ◈ *Sami Muhaidat, Khalifa University, UAE*
  - ◈ *Haibo Zhou, Nanjing University, China*

- ◈ **Statistics**
  - ◈ *Total number of submissions = 336*
  - ◈ *Total number of accepted papers = 134*
  - ◈ *Acceptance ratio = 39.8%*
  - ◈ *TPC members = 419*

IoT & Sensor Networks (IoT-AHSN)
IEEE ICC 2023

◆ **Co-Chairs**

- *Lyes Khoukhi, Normandie University, France*
- *Shuai Han, Harbin Institute of Technology, PRC*
- *R Venkatesha Prasad，Delft University of Technology, Netherlands*
- *Wendi Heinzelman，University of Rochester, USA*

◆ **Statistics**

- *Total number of submissions = 264*
- *Total number of accepted papers = TBD*
- *Acceptance ratio = TBD*
- *TPC members = 229*

Mobile and Wireless Networks (MWN)
IEEE ICC 2023

- ◈ **Co-Chairs**
  - ◈ *Chin-Tser Huang, Univ. of South Carolina, USA*
  - ◈ *Nizar Zorba, Qatar University, Qatar*
  - ◈ *Chun-Hung Liu, Mississippi State University, USA*
  - ◈ *Carla Fabiana Chiasserini, Politecnico di Torino, Italy*
- ◈ **Statistics**
  - ◈ *Total number of submissions = 219*
  - ◈ *Total number of accepted papers = TBD*
  - ◈ *Acceptance ratio = TBD*
  - ◈ *TPC members = 230*

Next-Generation Networking & Internet(NGNI) IEEE ICC 2023

- **Co-Chairs**
  - *Zuqing Zhu,University of Science and Technology of China, PRC*
  - *Mubashir H. Rehmani,Munster Technological University (MTU), Ireland*
  - *Periklis Chatzimisios,International Hellenic University, Greece*
- **Statistics**
  - *Total number of submissions = 188*
  - *Total number of accepted papers = TBD*
  - *Acceptance ratio = TBD*
  - *TPC members = 289*

Wireless Communications Symposium(WC)
IEEE ICC 2023

- ### Co-Chairs
  - *Daniel Benevides da Costa, Technology Innovation Institute (TII), Abu Dhabi, UAE*
  - *Sharief Oteafy, DePaul University, USA*
  - *Arsenia Chorti, Ecole Nat. Sup. de l'Electronique et de ses Apps, France*
  - *Li You, Southeast University, PRC*
  - *Mingyue Ji, University of Utah, USA*

- ### Statistics
  - *Total number of submissions = 323*
  - *Total number of accepted papers = TBD*
  - *Acceptance ratio = TBD*
  - *TPC members = 276*

Update on IoT-AHSN TC Activities

3. Nomination for Symposium Co-Chairs of ICC and GC

Nominations have been made **up to ICC 2024** for:

Symposium Recommendation for ICC 2024

- Bomin Mao (Northwestern Polytechnical University)
- Zhou Su (Xi'an Jiaotong University)
- Kaikai Chi (Zhejiang University of Technology)
- Weixiao Meng (Harbin Institute of Technology)

Update on IoT-AHSN TC Activities

3. Nomination for Symposium Co-Chairs of ICC and GC

Nominations have been made **up to GC 2024** for:

<mark>Symposium Recommendation for GC 2024</mark>

- Any candidate that has chaired, or has been selected to chair, 3 symposia from GC'21 through ICC'24 may not be selected.
- Moreover, we are encouraged to not select any candidate that is also chairing a symposium for ICC'24.
- The candidate's affiliation and email, bio or webpage (containing a bio), and a list of all prior ICC/GLOBECOM symposia chaired or experiences in other major conferences.

<mark>If you are interested, please feel free to contact me and send me the required information by Nov. 27</mark>

Update on IoT-AHSN TC Activities

4. Endorsement of IEEE Fellowship

- No endorsement request made
- Please contact us if you need endorsement

5. Nominations for 2023-2024 ComSoc Distinguished Lecturers)

Open July through 30 September 2022, and two TC members were nominated.

- Anwer Al-Dulaimi
- Tamer ElBatt

Please contact us if you would like to nominate yourself or a colleague for coming ComSoc DL program.

Update on IoT-AHSN TC Activities

We have four SIGs, which have been presenting various activities:

SIG - **IoT in Tactile Internet**
SIG - **Machine Learning for Ad Hoc, Sensor and IoT Networks**
SIG - **Internet of Unmanned Aerial Networks**
SIG - **Industrial IoT Networks**

If interested to join these SIG, please contact the IoT-AHSN TC Officers or SIG

SIG- IoT in Tactile Internet

LinkedIn group: https://www.linkedin.com/groups/12477846/

- **SIG leadership:**
  - Chair: Dr. Sharief Oteafy
  - Co-chair: Dr. Nikolaos Pappas
  - Advisor: Dr. Soumaya Cherkaoui

- **Recent activities:**
  No activities recently.

No activities reported at ICC 2022.

SIG- Machine Learning for Ad Hoc, Sensor and IoT Networks

LinkedIn group: https://www.linkedin.com/groups/12464979/

- **SIG leadership:**
  - Chair: Dr. Lyes Khoukhi
  - Advisor: Dr. Damla Turgut

- **Recent activities:**
  - **Seminar:**
    - **IoT & 5G: Intelligent Vision, January 11th, Adlen Ksentini (Professor at EURECOM)**
  - **Special issue:**
    - **"Safety and Security in autonomous vehicles" from various perspectives (ML, optimization, etc.), in the Journal of "Transactions on Internet Technology".**

SIG- Internet of Unmanned Aerial Networks

LinkedIn group: https://www.linkedin.com/groups/12476723/

- ## SIG leadership:
  - Chair: Dr. Moayad Aloqaily
  - Advisor: Dr. Sidi-Mohamed Senouci
- **Recent activities:**
  - **Upcoming Conference:**
    - **The 6th International Workshop on Intelligent Transportation and Autonomous Vehicles Technologies (ITAVT 2023)**
  - **Papers：**
    - **An Adaptive UAV Positioning Model for Sustainable Smart Transportation**
    - **Design Guidelines for Cooperative UAV-supported Services and Applications**
  - **Fund：**
    - **iTrans5G: Intelligent Transportation Management in Abu Dhabi for Beyond 5G Networks**

SIG- Industrial IoT Networks

LinkedIn group: https://www.linkedin.com/groups/12481021/

- **SIG leadership:**
  - Chair: Dr. Neeraj Kumar(neeraj.kumar@thapar.edu)
  - Advisor: Dr. Abdallah Shami

- **Recent activities:**
  No activities recently.

No activities reported at ICC 2022.

Other Businesses

- 2023 IOT-AHSN TC Outstanding Service Recognition Award

- SIG Activities

- Future GC/ICC Technical Program Committee Activities

- IEEE Fellow/Senior Member Promotion

Next Meeting

Next IoT-AHSN TC meeting at ICC23, Rome, Italy.
See you then. **In-Person Conference**