# Minutes of the IoT & AHSN TC meeting Held in conjunction with IEEE GC 2023

Time: Monday Dec 4, 2023, 8:30 am - 9:30am EST

Location: Grand Residence 101, Grand Hyatt Kuala Lumpur, Malaysia

#### **IoT & AHSN TC Officers:**

Chair: Jiajia Liu

Vice Chair: Sharief Oteafy Secretary: Shuai Han

**Number of Attendees: 43** 

The meeting started at 8:32 am.

## Welcome message and introduction

Dr. Jiajia Liu welcomed the attendees of the IoT & AHSN TC meeting. A total of 43 attendees were present at the meeting. The attendees were reminded to write donw their names in a prepared sheet.

#### Approval of the meeting agenda

Dr. Jiajia called for approval of the agenda. The motion was moved by Dr. Sharief Oteafy, and seconded by Dr. Shuai Han. The motion passed unanimously.

#### Approval of the minutes of the ICC 2023 IoT-AHSN TC meeting

The motion to approve meeting minutes of the IEEE ICC 2023 meeting was moved by Dr. Nidal Nasser and seconded by Dr. Sharief Oteafy. The motion passed unanimously.

#### IoT-AHSN TC 2023 Technical Achievement and Recognition Award

Dr. Jiajia Liu introduced the criteria of this award.

The recipient of this year's award is **Dr. Mohammed Atiquzzaman**, **University of Oklahoma**, for his achievements and contributions to architectures and networking protocols of IoT and ad hoc and sensor networks. Dr. Jiajia Liu presented the award to the recipient. A video of acceptance prepared in advance was played. The attendees congratulated **Dr. Mohammed Atiquzzaman** for winning this award.

#### TC secretary election

Dr. Jiajia presented the IoT-AHSN N&E Committee, election procedures and voting member list. In a meanwhile, the procedure for deciding on voting members were shown. And then, the candidates introduced themselves in turn: Dr. Rodolfo Coutinho (Concordia University, Canada), Dr. Bomin Mao (Northwestern Polytechnical University, China) and Dr. Qiang Ye (Dalhousie University, Canada). Rodolfo won by acclamation. Finally, new officers announced their remarks.

# Overview of IoT & AHSN TC

Dr. Jiajia presented an overview of the IoT & AHSN TC, explaining its purpose, areas of interest, and membership conditions (enrolling in the mailing list & being a ComSoc member), and reminded the attendees of the official website for the TC: <a href="https://ahsn.committees.comsoc.org/">https://ahsn.committees.comsoc.org/</a>

Attendees were asked to ensure that they register on the official mailing list with the full name and e-mail to ensure accurate tallying of active members in the TC.

#### The IoT & AHSN TC Newsletter Update

The current TC Newsletter Editorial Board, comprised of the following TC members Editor-in Chief: Qiang Ye, Dalhousie University, Canada

Co-Editors: Moez Esseghir, University of Technology of Troyes, France

Lu Lv, Xidian University, China

- Dr. Jiajia presented a summary of the 18<sup>th</sup> newsletter, which featured 1 article, and it is posted on the newsletter homepage (under the TC webpage), which includes all past issues, at this link: <a href="http://ahsn.committees.comsoc.org/newsletter/">http://ahsn.committees.comsoc.org/newsletter/</a>
- A call for contributions to future editions of the newsletter was extended to all attendees.

### Standards liaison report

- Dr. Rodolfo Coutinho, Concordia University (Canada) is the stands liaison. Jiajia presented Rodolfo's report on liaison activities
- Dr. Coutinho represents IoT-AHSN in the IEEE SPDB, SDB.

#### **Industry Seminar Series**

- Dr. Anwar Haque is the industry liaison, but he could not attend the meeting in person. 4 seminars was presented by Jiajia instead of Anwar.
- The industry liaison position is open for nominations.

# Report from the chair on TC activities

- An overview of the endorsement policy of the TC was presented by Dr. Jiajia. Specifically, when a conference is endorsed, a report on submissions, review process, etc., shall be sent to the TC for follow-up.
- The IoT & AHSN TC endorsed the following conferences:
  - CCCI 2023
  - ICCSN2023
  - IWCMC 2023
  - FCN2023
- GC/ICC Symposia (statistics were presented by Dr. Jiajia)
  - IoT & Sensor Networks (IoT-SN)
  - Mobile and Wireless Networks (MWN)
  - Next Generation Networks (NGN)
  - Wireless Communications Symposium (WC)
- Symposium Recommendation for ICC 2025
  - **Bomin Mao** (Northwestern Polytechnical University, China)
  - Chuan Huang (The Chinese University of Hong Kong, Shenzhen, China)
  - **Xu Chen** (Sun Yat-sen University, China)
- Nominations have been made up to GC2025.
  - Bomin Mao (Northwestern Polytechnical University, China)
  - Yang Wang (University of Science and Technology of China)
  - Kaikai Chi (Zhejiang University of Technology, China.)
- Endorsements for IEEE Fellow

- No endorsement request made.
- Please contact us if you need endorsement.
- Nomination for ComSoc Distinguished Lecturers
  - No nomination was received.
  - Please contact us if you would like to nominate yourself or a colleague.

#### **Special Interest Groups**

• The TC is running five active SIGs, with the following leadership:

| SIG   | Lead  | Advisor              |
|---|---|----------------------|
| ML for AHSN & IoT                                   | Lyes Khoukhi  | Damla Turgut         |
| IoT in Tactile Internet                             | Liudong Xing<br>Nikolaos Pappas                       | Soumaya Cherkaoui    |
| Internet of Unmanned Aerial Networks                | Moayad Aloqaily                                       | Sidi-Mohamed Senouci |
| Industrial IoT Networks                             | Bernardi Pranggono                                    | Abdallah Shami       |
| Ubiquitous Intelligence for<br>Internet of Vehicles | Qiang Ye Ning Zhang Peng Yang Haixia Peng Xiaoyu Wang | Cheng Li             |

- SIG on Machine Learning for AHSN and IoT networks:
  - May 19th, by Z. Abouelhouda (Professor at Yncrea Ouest)
    - Title: Intelligent vision for securing IoT 5G
  - December 15th, by A.Tougou (Professor at Dublin City University)
    - Title: New models for resources allocation in NGN
  - A special issue about "Safety and Security in autonomous vehicles" from various perspectives (ML, optimization, etc.), is under progress in the Journal of "Transactions on Internet Technology".
  - Application is ongoing for managing and chairing the international conference on New Technologies, Mobility and Security (NTMS2024).
  - Series of seminar about the use and applications of ML are under planning in the coming period.
- SIG on IoT in Tactile Internet:
  - Organized two Webinar Talks:
    - Title: On the Utility of Gradient Compression in Distributed Training Systems
      - Time: 9am, June 13, 2023 (Eastern Time)
      - Speaker: Dr. Hongyi Wang, Carnegie Mellon University, USA
      - Number of attendees: 23
    - Title: Service Reliability of Wireless Telecommunication Networks for the Purpose of Scientific Maintenance

- Time: 8am, November 21, 2023 (Eastern Time)
- Speaker: Dr. Yan-Fu Li, Tsinghua University, China
- Number of attendees: 72
- Organized an IEEE IoT Journal Special Issue on "Prognostics and Health Management using the Internet of Things"
- SIG on Internet of Unmanned Aerial Networks:
  - Keynote on "ZERO-TOUCH NETWORK SECURITY: USE-CASE DRIVEN",
     Abdullah Shami, IEEE BCCA, Kuwait, 2023.
  - IEEE ICC 2024, WORKSHOP ON AERIAL INTERNET OF THINGS (A-IOT '24): https://icc2024.ieee-icc.org/workshop/ws-22-workshop-aerial-internet-things-iot-24
  - IEEE ICC 2024, WORKSHOP ON EMERGING TECHNOLOGIES IN AERIAL AND SPACE NETWORKS: https://icc2024.ieee-icc.org/workshop/ws-02-workshop-emerging-technologies-aerial-and-space-networks#
  - IEEE JSAC, Special Issue: Zero Trust for Next-Generation Networking, 2024-2025.

#### • SIG on Industrial IoT Networks:

- A special issue on "Internet of Things, Edge Computing, and Artificial Intelligence for Smart Grid - 2nd Edition" in the Energies journal. Deadline for manuscript submissions: 18th March 2024
- Webinar on The Industrial Internet of Things Networking by David Lou, Ph.D., Chief Researcher, Huawei Technologies, June 2023.
- Webinar on Pervasive Artificial Intelligence for IIoT Systems by Mohsen Guizani, Professor and IEEE Fellow, Mohamed Bin Zayed University of Artificial Intelligence (MBZUAI), UAE, May 2023.
- Keynote Speaker, "Securing the Internet of Things: Challenges, Strategies, and Future Directions," 9th International Conference on Cyber Security, Privacy in Communication Networks (ICCS), Cardiff Metropolitan University, Dec 2023.
- Invited Speaker, "Securing the Frontier of Healthcare: The Critical Imperative of IoMT Security," The 8th International Conference on Science and Technology (ICST 2023), Nov 2023.
- Invited Speaker, "AI-Based Intrusion Detection for the Internet of Medical Things," The
   6th International Conference on Science and Engineering (ICSE 2023), Aug 2023.
- Co-Chair for the ICPS Architectures and Engineering Technical Track, 7th IEEE
   International Conference on Industrial Cyber Physical System (ICPS 2024), May 2024.

#### • SIG on Ubiquitous Intelligence for Internet of Vehicles

- Special Issue on "Ubiquitous Intelligence for Internet of Vehicles" [CFP],
- IEEE Internet of Things Magazine [Guest Editorial]
- IEEE Network, SI on "6G Non-Terrestrial Networks for Intelligent IoT Services" [CFP]
- IEEE INFOCOM Workshop on Pervasive Network Intelligence for 6G Networks (PerAI-6G) (30+ submissions), May 2023 [CFP]
- 31st Biennial Symposium on Communications (BSC 2023), July 2023 [CFP]
- IEEE ICCC 2023 Workshop on Edge Intelligence for 6G Networks, August 2023
- (25+ submissions) [CFP].
- Organized keynote speeches in workshops (ICCC 2023)

 IEEE INFOCOM 2024 Workshop on Pervasive Network Intelligence for 6G Networks (PerAI-6G), May 2024, Vancouver, Canada.

#### **Other Businesses**

- Future GC/ICC Technical Program Committee Activities
- IEEE Fellow/Senior Member Promotion
- Dr. Cheng Li introduced the TC reconstructions.

# **Next meeting**

- Next IoT & AHSN TC meeting with IEEE ICC2024
- Next meeting will be in person in Denver, USA.

Meeting Adjourned at 9:25 AM

# Appendix A – List of attendees

| Names                 |                       |  |
|-----------------------|-----------------------|--|
| Abdallah Shami        | Xuefeng Li            |  |
| Abderrezak Rachedi    | Yacine Ghamri-Doudane |  |
| Ahmed Refaey Hussein  | Yijie Xun             |  |
| Bomin Mao             | Yishi Zhu             |  |
| Cheng Li              | Yuanhao Li            |  |
| CHIA-HAN CEE          | Yuanyuan Sun          |  |
| Cyn Sikora            | Zhiqiang Li           |  |
| Damla Turgut          |                       |  |
| Falko Dressler        |                       |  |
| Farid Nait-Abdesselam |                       |  |
| Haixia Peng           |                       |  |
| Hongwei Li            |                       |  |
| Hongzhi Guo           |                       |  |
| Hossam Hassanein      |                       |  |
| Ibrahim Amer          |                       |  |
| Jalel Ben Othman      |                       |  |
| Jiadai Wang           |                       |  |
| Jiajia Liu            |                       |  |
| Jinhyi Li             |                       |  |
| Luca Foschini         |                       |  |
| Moayad Aloqaily       |                       |  |
| Nei kato              |                       |  |
| Nadjib Aitsaadi       |                       |  |
| Nidal Nasser          |                       |  |
| Qi Guo                |                       |  |
| Qiang Ye(Dalhousie)   |                       |  |
| R • Venkatesha Prasad |                       |  |
| Rodolfo Coutinho      |                       |  |
| Rongxing Lu           |                       |  |
| Safa Otoum            |                       |  |
| Sharief Oteafy        |                       |  |
| Shuai Han             |                       |  |
| Shui Yu               |                       |  |
| Sidi Mohammed Senouci |                       |  |
| Soumaya Cherkaoui     |                       |  |
| Xiaohui Liang         |                       |  |