



*IEEE ICC, 22 May 2019*

**IEEE Technical Committee  
on Cognitive Networks (TCCN)**

**Chair: Yue Gao**

**Queen Mary University of London**

# Officers (2019-2020)



- **Chair**

- Yue Gao, Queen Mary University of London, UK

- **Vice-Chairs**

- Oliver Holland, Kings College London, UK (Europe/Africa)
- Lingyang Song, Peking University (Asia Pacific)
- Daniel Benevides da Costa, Federal University of Ceará, Brazil (Americas)

- **Secretary**

- Lin Gao, Harbin Institute of Technology, Shenzhen, China

# Agenda



- 1. Welcome and Introduction**
- 2. Attendance Register**
- 3. Approval of the Agenda**
- 4. Approval of the GLOBECOM 2019 (Dec 2019) TCCN meeting minutes**
- 5. Reports on Special Interest Groups (SIGs)**
- 6. Reports on conferences**
- 7. Reports on publications**
- 8. TCCN publicity**
- 9. Next TCCN Meeting**
- 10. Any other business**

# TCCN activities



- **TCCN SIGs and Newsletter**
- **TCCN Awards**
- **TCCN nominations**
- **How to get involved in TCCN**

# TCCN Special Interest Groups (SIGs)

- **What is an SIG?**
  - SIGs are mini-TC, representing the hot and emerging research areas in the general field of cognitive networks
- **What does an SIG do?**
  - Attract submissions to CRN symposium at ICC and GLOBECOM
  - Organize journal special issues for TCCN and others
  - Organize workshops and conferences
  - Organize other related technical activities (conference call, blogs, etc.)
- **Who are in an SIG?**
  - Leadership team: a Chair, one or more Vice-Chairs, one or more advisors
  - 10+ key members
  - Considering geographical and academia/industry balance
- **How to establish an SIG?**
  - Fill in the form with the proposed SIG team and activities <http://cn.committees.comsoc.org/special-interest-groups-sigs/application-for-special-interest-groups/>
  - Send to TC Chair
  - Usually go through 1-2 rounds of feedback before official approval

## Current Status of TCCN SIGs



- **Cognitive Network Security SIG**
- **SIG on Cognitive Radio for 5G**
- **SIG on Data-Driven Cognitive Networks (DDCN)**
- **SIG on AI Embedded Cognitive Networks (AICN)**
- **SIG on Social Behaviour Driven Cognitive Radio Networks**
- **SIG on Cognitive Communications and Networking in Cyber-Physical Systems (CCNCPS)**
- **SIG on Energy-harvesting Cognitive Radio Networks**

# TCCN Awards



- **TCCN has two awards**
- **IEEE ComSoc TCCN Recognition Award**
  - The recognition award is given to (up to) one individual who is deemed to have made significant and sustained contributions to cognitive network community. The intent is to recognize contributions over a period of time via any of the following modalities including combinations thereof:
    - **Scholarly excellence** in cognitive network research as evidenced by publications, patents and hardware/software prototypes;
    - Technical or scholarly leadership as evidenced by contributions to standards, patents, leading research, and/or significant project management;
    - Meritorious service to the cognitive network community inclusive of IEEE ComSoc, industry and government policy.
- **IEEE ComSoc TCCN Publication Award**
  - The recognition award is given to (up to) one individual or group who are deemed to have made outstanding technical contributions to TCCN. The basis of judgment will be archival, peer-reviewed publications in ComSoc conferences and journals over any period prior to the award year.

# TCCN Award Procedures



- **Two awards are overlapping in the area of Scholarly excellence**
- **To avoid confusion, propose to remove “scholarly excellence” from recognition award**
- **IEEE ComSoc TCCN Recognition Award:**
  - Technical or scholarly leadership and meritorious service to the cognitive network community
- **IEEE ComSoc TCCN Publication Award:**
  - Outstanding technical contributions to TCCN as evidenced by publications.



# Past TCCN Awardees

- **IEEE ComSoc TCCN Recognition Award:**

- Prof. Joseph Mitola III (2011), For his pioneering contributions to and continuing leadership of the cognitive radio field.
- Prof. Ian F. Akyildiz (2017), for his pioneering contributions to spectrum sensing, spectrum sharing algorithms and communication protocols for cognitive radio networks.
- Prof. Ying-Chang Liang (2018) for his outstanding contributions to cognitive radio research and meritorious services to the cognitive network community.

- **IEEE ComSoc TCCN Publication Award:**

- Dr. Jon M. Peha (2011), Carnegie Mellon University, For his outstanding contributions to techno-economic analysis of spectrum allocation policies.
- Dr. Vahid Tarokh (2012), Harvard University, For his outstanding contributions to new information theoretic models and analysis of cognitive radio networks.
- Prof. Khaled B. Letaief and Prof. Wei Zhang (2017), for their outstanding contributions to theory and practice of cognitive radio technology
- Prof. Zhi Tian (2018) for her outstanding contributions to spectrum sensing technology for cognitive radio networks.

**2019 closing date for nominations: October 2019**

# TCCN Nominations and Endorsement



- **ICC/GC Symposium Chairs**
- **ComSoc Distinguished Lecturers**
- **IEEE Senior member and Fellow grades**

# ICC/GC Symposium Chair Nominations



- **TCCN supports “Cognitive Radio and Network Symposium” in ICC/GC**
- **Open call-for-nominations from TCCN members**
- **Decisions voted by TCCN Officers (avoiding Col)**
- **Selection criterions**
  - Research record
  - Service record
  - **Service record to TCCN: SIG, Newsletter, Standardization, Publicity, Conference, Journal**

# ComSoc Distinguished Lecturers (DLs) Nominations



- **TCCN nominates up to 4 ComSoc Distinguished Lecturers every September**
- **Open call-for-nominations from TCCN members**
- **Decisions voted by TCCN Officers (avoiding Col)**
- **Selection criteria**
  - Research record
  - Public speaking record
  - **Service record to TCCN: SIG, Newsletter, Standardization, Publicity, Conference, Journal**
- **DLs can also be nominated by individual IEEE Senior Members**

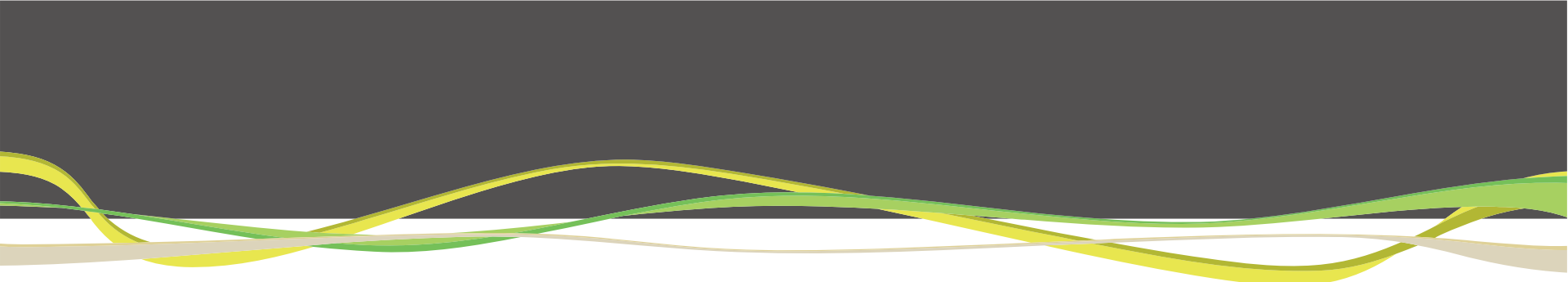
# How to Get Involved in TCCN



- **Many ways of getting involved**

- Organize Special Interest Groups (SIGs) (contact: Yue Gao, Vijay Rao)
- Organize special issues for the TCCN Newsletter (contact: Daniel Benevides da Costa)
- Participate in TCCN related standardization efforts (contact: Oliver Holland)
- Contribute to the publicity efforts of TCCN (contact: Lin Gao, Yuan Ma)
- Contribute to student competition program (contact: Lucio Marcenaro, Sai Huang)
- Involve TCCN in ComSoc conference organization (contract: Lingyang Song)
- Involve TCCN in ComSoc journal special issues (contact: Yue Gao)

- **TC will reward excellent volunteers through various nominations and endorsements**



**Thanks you!**