

SIG: Data-Driven Cognitive Networks (D²CN)

Li-Chun Wang,
Department of Electrical and
Computing Engineering,
National Chiao Tung University

Data-Driven Cognitive Networks (D²CN)



Chair:

Li-Chun Wang,

**Department of Electrical and
Computing Engineering,
National Chiao Tung University**

lichun@cc.nctu.edu.tw



Vice Chair:

Yong Li

**Dept. of Electronic
Engineering,
Tsinghua University**

Liyong07@tsinghua.edu.cn



Vice Chair:

Steve Uhlig

**School of EECS,
Queen Mary, University of
London.**

steve.uhlig@qmul.ac.uk

Scope and Objectives

- Data are collected from various sources, including radio channels, user locations, service access data, social networking data, network-status and management data.
- A revolution in CRN from a traditional knowledge-driven CRN into a more powerful data-driven CRN
- This sig provides a platform on the development of DDCN, including key technologies, data sharing opportunities and future research directions.

Workshop Activities

- IEEE International Workshop on Knowledge Centric Networking (KCN), conjunction in INFOCOM 2018
 - Present novel contributions in the field of machine learning and deep learning applied to networking
- Workshops Day: April 16th, 2018
 - Submissions: 10+
 - Presentations: 8
 - Keynotes: 2
- TPC co-chairs:
 - **Yong Li (Tsinghua University)**
 - Zhenjiang Li (City University of Hong Kong)

Workshop Proposal

- 2019 Globecom Workshop (Hawaii)
- 2019 CCNC Workshop (Las Vegas)

Journal SI Activities

- IEEE JSAC SI Artificial Intelligence and Machine Learning for Networking and Communications.
 - seeks for novel contributions in the field of machine learning and big data analytics applied to communications and networking.
- Time
 - **Manuscript Due:** July 15, 2018
 - First revision notification:** October 19, 2018
 - Acceptance notification:** December 7, 2018
 - Final manuscript due:** January 3, 2019
 - Publication of the Special Issue:** First quarter 2019
- Participant
 - **Yong Li**, Tsinghua University, China, liyong07@tsinghua.edu.cn

Other Activities Plan

- **Propose Workshops**
 - IEEE conference of GLOBECOM, INFOCOM, etc.
- **Propose Special Issues**
 - IEEE Trans. on Cognitive Network, Trans. On Big Data, IEEE Communications Mag., Signal Processing Mag., etc.
- **Organizing regular meetings**
- **Invitation talks from this area**
- **Building data-sharing community and organize competitions:**
- [Maintain IEEE TCCN D2CN SIG Website:](#)
- <https://www.linkedin.com/groups/13516608/profile>

Thanks!

Li-Chun Wang,
Department of Electrical and
Computing Engineering,
National Chiao Tung University