

SIG: Data-Driven Cognitive Networks (D²CN)

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Data-Driven Cognitive Networks (D²CN) 2016-2018



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Data-Driven Cognitive Networks (D²CN) 2019-2021



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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

- UbiComp 2019 AppLens Workshop
 - [AppLens 2019: The 2nd Workshop on Mining and Learning from Smartphone Apps for Users](#)
 - <http://www.shazhao.net/applens2019/>
- Workshop co-chairs:
 - Sha Zhao (Zhejiang University)
 - **Yong Li (Tsinghua University)**
 - Sasu Tarkoma (University of Helsinki),

Speech on

Data Driven Cognitive Networks

- UbiComp AppLens Workshop, Sept. 2019
 - Yong LI, Context-aware App Usage Modelling and Prediction
- Workshop of Mobile Computing Networks 2018, Beijing, China, June 2019
 - Yong LI, DeepMove: Predicting Human Mobility with Deep Neural Networks
- IEEE VTC'19 Spring Tutorial, **Kuala Lumpur, Malaysia (Apr. 28~May 1)**
 - Li-Chun Wang, Machine Learning Radio Resource Management for Future Mobile Networks

Journal SI Activities

- IEEE JSAC SI Artificial Intelligence and Machine Learning for Networking and Communications.
 - Status: Publishing the papers.
 - Another SI about AI for Wireless Phy Layer.
- 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

Upcoming Workshop Proposal Submission

- 2019 Globecom Workshop (Hawaii) (Open soon)
- 2020 Globecom Workshop (Taipei)

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!