SIG: Data-Driven Cognitive Networks (D\textsuperscript{2}CN)

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Data-Driven Cognitive Networks (D$^2$CN) 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

• 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!