

2019

**Report by IEEE TCCN
SIG on AI Embedded Cognitive Networks (AICN)**

**Kai Yang
Chair IEEE TCCN SIG on AICN
Distinguished Professor
Computer Science Department
Tongji University**

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Objective and Scope

AI has recently attracted significant attentions in the Telecom domain, both from the carrier side and the equipment vendor side. This is due to the fact that operators are sitting on gold mines of networked data and there are strong demands for methods, algorithms, and tools that are developed to detect network anomalies, optimize the network RF coverage, improve the customer experience, and gain other actionable insights from the massive amount of data set. The ultimate goal is to make the communication network self-adaptive, self-managed, and truly cognitive. Toward this end, we have formed the AICN SIG group to provide a platform for researchers, data scientists, computer scientists to share their ideas, key technologies, and latest results in the area of AI embedded cognitive networks.

Officers and Advisors**Officers:**

Dr. Kai Yang, Tongji University,
Dr. Sijia Liu, University of Michigan
Dr. Yanjia Sun, Huawei Research, USA
Dr. Yasin Yilmaz University of South Florida, USA
Dr. Weiqiang Xu, Zhejiang University of Science and Technology

Advisors:

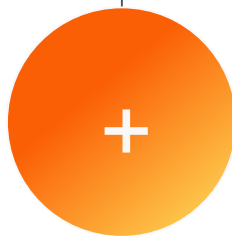
Dr. Alfred Hero, University of Michigan
Dr. Yingchang Liang, University of Sydney

Founding Members

Dr. Richard Gitlin, University of South Florida, USA, IEEE Fellow, National Academy of Engineering Member
Dr. Alfred Hero, University of Michigan, USA, IEEE Fellow
Dr. Yingchang Liang, University of Sydney, IEEE Fellow
Dr. Kwang-Cheng Chen, University of South Florida, USA, IEEE Fellow
Dr. Huseyin Arslan, University of South Florida, USA, IEEE Fellow
Dr. Ismail Guvenc, North Carolina State University, USA
Dr. Biao Chen, Professor, Syracuse University, USA, IEEE Fellow
Dr. Engin Masazade, Yeditepe University, Turkey
Dr. Hao Chen, Boise State University, USA
Dr. Pin-Yu Chen, Research Scientist, AI Foundations Lab IBM Thomas J. Watson Research Center, USA

1 NAE member + 6 IEEE Fellows

Members from both academia and industry



Established on June 2017



Conference organized by AICN members

2020 IEEE International Conference on Communications
Cognitive Radio and AI-enabled Networks Symposium
Symposium Co-Chair: Kai Yang

[KDD 2019] Adversarial Learning Methods for Machine
Learning and Data Mining Workshop
Symposium Co-Chair: Pin-Yu Chen



Journal Special Issue Organized by AICN members

Wiley Wireless Communications and Mobile Computing
Special Issue on Machine Intelligence and Cyber Security
for Cognitive Internet of Things
Pin-Yu Chen, Sijia Liu, Yasin Yilmaz
AICN co-chair

2019

Thanks