

# **TCCN Technical Committee Meeting**

## **Status Report on IEEE Transactions on Cognitive Communications and Networking**

ICC 2020, Virtual Conference

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Editor-in-Chief

**IEEE Transactions on Cognitive Communications  
and Networking**



# IEEE TCCN Journal Scope

The IEEE Transactions on Cognitive Communications and Networking (TCCN) is committed to timely publishing of high-quality manuscripts that advance the state-of-the-art of cognitive communications and networking research. **The focus of the Transactions will be on “cognitive” behaviors in all aspects of communications and network control**, from the PHY functions (including hardware) through the applications (including architecture), and in all kinds of communication networks and systems regardless of type of traffic, transmission media, operating environment, or capabilities of communicating devices.



# Subject Areas

- **Topics of Interest (but not limited to)**
  - Machine learning and artificial intelligence for communications and networking
  - Distributed learning, reasoning and optimization for communications and networking
  - Architecture, protocols, cross-layer, and cognition cycle design for intelligent communications and networking
  - Information/communications theory and network science for intelligent communications and networking
  - Ontologies, languages, and knowledge representation for intelligent communications and networking
  - Security and privacy issues in intelligent communications and networking
  - Cognitive radio and dynamic spectrum access
  - Cognitive technologies supporting software-defined radios, systems and networks
  - Emerging services and applications enabled by intelligent communications and networks
- **Subject Areas:**
  - Cognitive Radio and dynamic spectrum access (9 editors)
  - AI-empowered Communications (8 editors)
  - AI-empowered Networking (8 editors)
  - AI-empowered Resource Management (8 editors)

# Special Issues in TCCN

- **Submission closed**

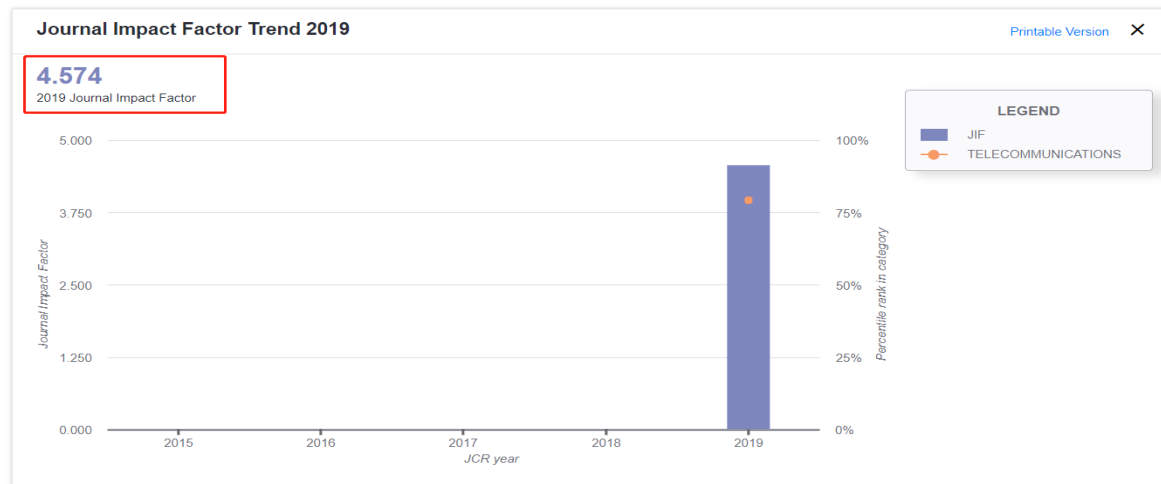
- Deep Reinforcement Learning for Future Wireless Communication Networks (29 submissions, *published in vol. 5, issue 4, Dec., 2019.*)
- Evolution of Cognitive Radio to AI-enabled Radio and Networks (25 submissions, *published in vol. 6, issue 1, Mar., 2020.*)
- Intelligent Resource Management for 5G and Beyond (30 submissions, *published in vol. 6, issue 2, Jun., 2020.*)
- AI-Based Licensed/Unlicensed Spectrum Interoperability in Future Mobile Wireless System (18 submissions)
- Intelligent Mobile Edge Computing Systems: Challenges and Solutions (36 submissions)
- Machine Learning and Artificial Intelligence for the Physical Layer (36 submissions)

- **On-going submission**

- Intelligent Surfaces for Smart Wireless Communications (**submission deadline: 1 Sept. 2020**)
- Convergence of Collaborative Distributed Machine Learning and Edge Computing Towards Intelligent Networking (**submission deadline: 1 Nov. 2020**)

# IEEE TCCN Impact Factor 2019

- ***IEEE TCCN* received the first Impact Factor on JCR report 2019.**



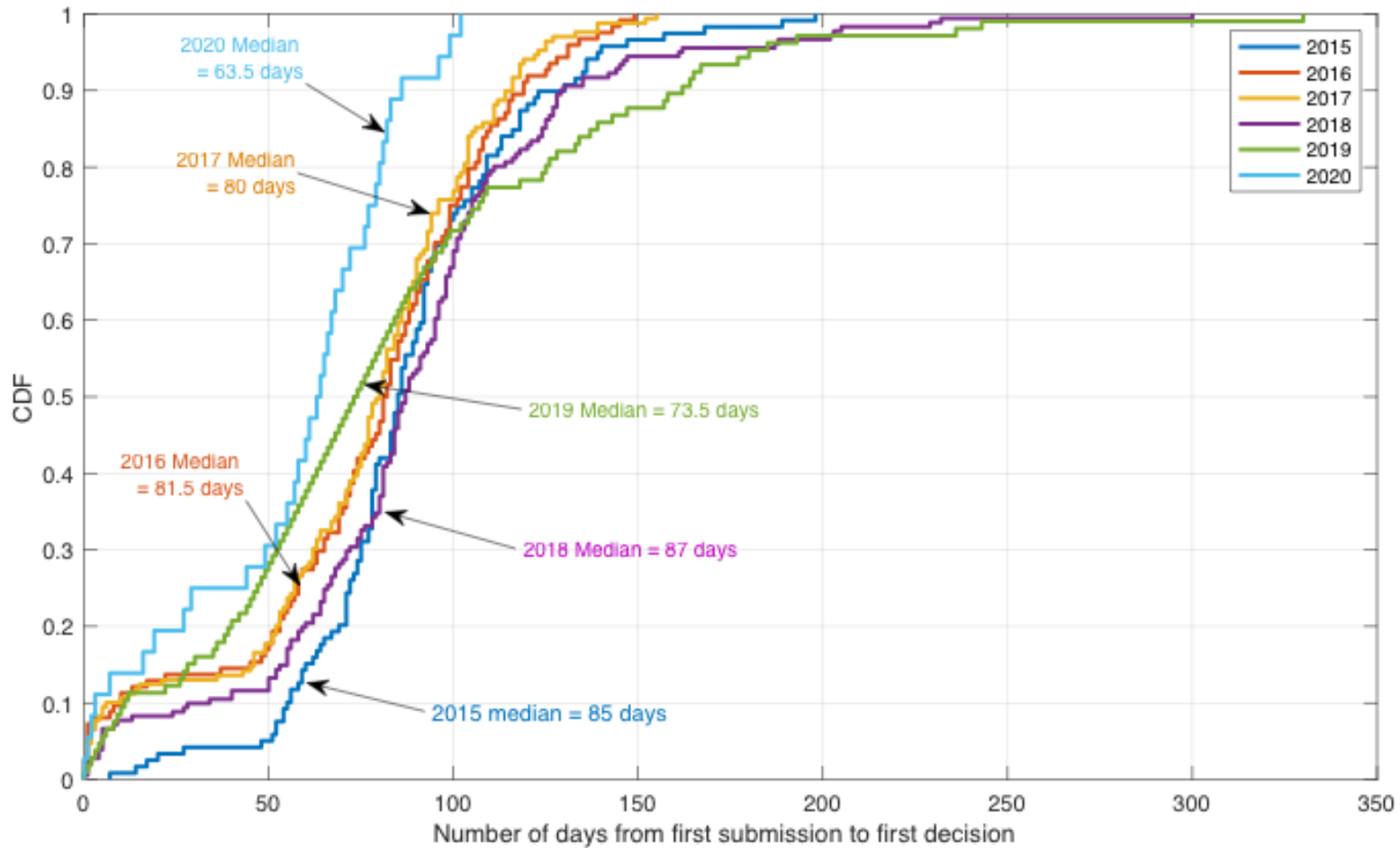
- **IEEE J. Selected Areas of Communications 11.420 9.302**
- **IEEE Trans. on Vehicular Technology 5.379 5.339**
- **IEEE Trans. on Wireless Communications 6.779 6.394**
- **IEEE Trans. on Communications 5.646 5.690**
- **IEEE Trans. on Cognitive Communications and Networking 4.574**
- **IEEE Trans. on Mobile Computing 5.112 4.474**
- **IEEE/ACM Trans. on Networking 3.315 3.597**

# Paper Submission Statistics (Since 2015)

Year	Number of Submitted Papers
2015	125
2016	130
2017	177
2018	185
2019	278
2020	135

# TCCN Statistics

## From First Submission to First Decision (as of May 15, 2020)



# Sub-to-Pub Statistics

	2018 Q4	2019 Q1	2019 Q2	2019 Q3	2019 Q4
Average weeks	31.4	26.9	27.7	29.9	28.8
Median weeks	29.3	28.6	26.0	26.8	28.6
Number of Articles	20	19	32	35	42



# Discussion Points

- Publicity
  - Attracting more submissions
  - Attracting more readers
- High quality publications
  - Special issues
  - Invited papers
- Any other suggestions?