# Dr. Jingwen Tong

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# Work Experience

Postdoctoral Fellow Aug. 2022 - Present

Department of Electronic and Computer Engineering (ECE)

The Hong Kong University of Science and Technology (HKUST)

Room 3112A, Academic Building, HKUST, Clear Water Bay, Kowloon, NT, Hong Kong

Research Supervisor: Professor, Jun Zhang

China Jiliang University, Hangzhou, China

## **Biography**

Ph.D. Degree, Dept. of Informatics and Communication Engineering Xiamen University, Xiamen, China Research Supervisor: Professor, Liqun Fu	Sep. 2018 - Jun. 2022
Visiting Scholar, Dept. of Electrical and Computer Engineering University of Houston, Houston, USA Research Supervisor: Professor, Zhu Han	Oct. 2019 - Nov. 2020
M.S. Degree, Communication and Information System Ningbo University, Ningbo, China Research Supervisor: Professor, Ming Jin	Sep. 2015 - Jun. 2018
B.S., Degree, Communication Engineering	Sep. 2011 - Jun. 2015

## **Journals**

Zhenzhen Chen, **Jingwen Tong**, Liqun Fu, Jun Zhang, and Zhu Han. From Learning to Analytics: Improving Model Efficacy with Goal-Directed Client Selection [J], *IEEE Transactions on Wireless Communications*, (Jan. 2023, Submitted)

Liqun Fu, **Jingwen Tong**, Tongtong Lin, and Jun Zhang. Online Resource Allocation for User Experience Improvement in Mobile Edge Clouds [J], *IEEE Transactions on Wireless Communications*, (Oct. 2022, Submitted)

**Jingwen Tong**, Liqun Fu, Yizhe Wang, and Zhu Han. Model-Based Thompson Sampling for Frequency and Rate Selection in Underwater Acoustic Communications [J], *IEEE Transactions on Wireless Communications*, DOI: 10.1109/TWC.2023.3247450.

**Jingwen Tong**, Liqun Fu, and Zhu Han. Age-of-Information Oriented Scheduling for Multi-Channel IoT Systems with Correlated Sources [J], *IEEE Transactions on Wireless Communications*, vol. 21, no. 11, pp. 9775-9790, Jun. 2022.

**Jingwen Tong**, Hongliang Zhang, Liqun Fu, Amir Leshem, and Zhu Han. Two-Stage Resource Allocation in Reconfigurable Intelligent Surface Assisted Hybrid Networks via Multi-Player Bandits [J], *IEEE Transactions on Communications*, vol. 70, no. 5, pp. 3526-3541, May 2022.

**Jingwen Tong**, Liqun Fu, and Zhu Han. Throughput Enhancement of Full-Duplex CSMA Networks Using Multi-Player Bandits [J], *IEEE Internet of Things Journal*, 2021, Mar. 3, 15(8):11807-11821.

**Jingwen Tong**, Ming Jin, Qinghua Guo, and Youming Li. Cooperative Spectrum Sensing: A Blind and Soft Fusing Detector [J], *IEEE Transactions on Wireless Communications*, 2018, Apr. 4, 17(4):2726-2737.

**Jingwen Tong**, Ming Jin, Qinghua Guo, and Long Qu. Energy Detection under Interference Power Uncertainty [J], *IEEE Communications Letters*, 2017, Aug. 1, 21(8):1887-1890.

#### Conferences

Zhenzhen Chen, **Jingwen Tong**, Liqun Fu, and Zhu Han. Over-the-Air Computing Aided Federated Learning and Analytics via Belief Propagation Based Stochastic Bandits [C], *IEEE International Conference on Communications (ICC)*, 2022, May, Seoul, Korea.

**Jingwen Tong**, Shuyue Lai, Liqun Fu, and Zhu Han. Optimal Frequency and Rate Selection Using Unimodal Objective Based Thompson Sampling Algorithm [C], *IEEE International Conference on Communications (ICC)*, 2020, Jun. 7, Dublin, Ireland.

**Jingwen Tong**, Liqun Fu, and Zhu Han. Throughput Enhancement of Full-Duplex CSMA Networks via Adversarial Multi-Player Multi-Armed Bandit [C], *IEEE Global Communications Conference (GLOBECOM)*, 2019, Dec. 9, Waikoloa, HI, USA.

## Research Interests

- Multi-Armed Bandit (MAB), Optimization, Game Theory
- Resource Allocation in Wireless Communications

### Service

Session Chair: IEEE/CIC International Conference on Communications in China (ICCC), Xiamen, 2021 Technical Program Committee: IEEE Global Telecommunications Conference (Globecom), 2023

Workshop Organization: Huawei-HKUST Joint Workshop on Theory for Futrue Wireless, 2022

Review for: IEEE Transaction on Wireless Communications; IEEE Transaction on Communications; IEEE

Transaction on Vehicular Technology; IEEE Transaction on Cognitive Communications and Networking; IEEE Communications Magazine; IEEE Transactions on Mobile Computing; IEEE Journal on Selected Areas in Communications; IEEE Communications Letters; IEEE Wireless Communications Letters; Journal of Communications and Information Networks; Conferences such as ICC, VTC, WCNC, GLOBECOM, INFOCOM

## **Awards and Honors**

Excellent doctoral dissertation, Xiamen University	2022
Outstanding Graduate, Xiamen University	2022
Wande scholarship, Xiamen University	2022
IEEE ComSoc Student Travel Grant, IEEE ComSoc	2020
The Chinese Government Scholarship, China Scholarship Council	2019
First-class Scholarship, Ningbo University	2018
Outstanding Graduate, Ningbo University	2018
Ningbo Graduate Academic Festival, Gold Award, Ningbo City	2017
National Graduate Mathematical Contest in Modeling, Second Prize, Ministry of Education	2017
National Graduate Mathematical Contest in Modeling, Second Prize, Ministry of Education	2016
National Inspirational Scholarship (2/80), Chinese Government	2013
National Undergraduate Electronic Design Competition, Second Prize, Ministry of Education	2013