

Associate Professor Feng Li

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Academic Qualification:

Ph.D., Faculty of Information Technology, Macau University of Science and Technology
M.S., Department of Mathematics, The University of Hong Kong, Hong Kong
B.S., Department of Mathematics, The Shandong University, China

Teaching Area

Calculus
Linear Algebra

Research Area

Internet of Things (IoT)
Machine Learning and Its Applications
Wireless Communications and Networking
Performance Analysis

Working Experience

Jul. 2018 ~ present, Associate Professor, Faculty of Information Technology, MUST
Jul. 2013 ~ Jun. 2018, Assistant Professor, Faculty of Information Technology, MUST
Sep.2007 ~ Jun. 2013, Lecturer, Faculty of Information Technology, MUST

Academic Publications (Selected Journal Papers)

Shumin Yao, Li Feng, Qinglin Zhao, Qiyu Yang, Yong Liang: ERFR-CTC: Exploiting Residual Frequency Resources in Physical-Level Cross-Technology Communication. *IEEE Internet Things J.* 8(7): 6062-6076 (2021)

Zhimin Wang, Qinglin Zhao, Li Feng, Fangxin Xu: How Much Benefit Can Dynamic Frequency Scaling Bring to WiFi? *IEEE Trans. Mob. Comput.* 20(3): 1046-1063 (2021)

Guangcheng Li, Qinglin Zhao, Yu Wang, Tie Qiu, Kan Xie, Li Feng: A Blockchain-Based Decentralized Framework for Fair Data Processing. *IEEE Trans. Netw. Sci. Eng.* 8(3): 2301-2315 (2021)

Shumin Yao, Li Feng, Jing Zhao, Qinglin Zhao, Qiyu Yang, Wenchao Jiang: PatternBee: Enabling ZigBee-to-BLE Direct Communication by Offset Resistant Patterns. *IEEE Wirel. Commun.* 28(3): 130-137 (2021)

Zhimin Wang, Li Feng, Shumin Yao, Kan Xie, Yuqiang Chen: Low-Cost and Long-Range Node-Assisted WiFi Backscatter Communication for 5G-Enabled IoT Networks. *Wirel. Commun. Mob. Comput.* 2021: 8540457:1-8540457:9 (2021)

Li Feng, Yi Liu, Jianlan Guo, Yuqiang Chen: Predicting impact of Hitchhike on coexisted heterogeneous IoT networks. *Appl. Soft Comput.* 110: 107741 (2021)

Fangxin Xu, Qinglin Zhao, Li Feng, Chao Yang, Jie Yang, Tong Jin, Hong Liang: A Novel Successive-Interference-Cancellation-Aware Design for Wireless Networks Using Software-Defined Networking. *IEEE Access* 9: 124861-124872 (2021)

Li Feng, Qinglin Zhao, Zhiguo Shi, Zhenni Li, Yong Liang: Modeling the Impact of the MoreData Parameter for Wireless Power-Saving Protocols. *IEEE Trans. Green Commun. Netw.* 4(4): 1061-1071, (2020).

Guang Yang, Xiufang Shi, Li Feng, Shibo He, Zhiguo Shi, Jiming Chen: CEDAR: A Cost-Effective Crowdsensing System for Detecting and Localizing Drones. *IEEE Trans. Mob. Comput.* 19(9): 2028-2043 (2020).

Qinglin Zhao, Li Feng, Lian Zhao, Zhenni Li, Yong Liang: SatOpt Partition: Dividing Throughput-Stability Region for IEEE 802.11 DCF Networks. *IEEE Trans. Veh. Technol.* 69(9): 10278-10290 (2020).

Zhijie Ma, Li Feng, Zhimin Wang: Supporting Asymmetric Transmission for Full-Duplex Smart-Home Networks. *IEEE Access* 7: 34807-34822 (2019)

Zhijie Ma, Li Feng, Fangxin Xu: Design and Analysis of a Distributed and Demand-Based Backscatter MAC Protocol for Internet of Things Networks. *IEEE Internet Things J.* 6(1): 1246-

Chaoqun Yang, Li Feng, Zhiguo Shi, Rongxing Lu, Kim-Kwang Raymond Choo: A Crowdsensing-based Cyber-physical System for Drone Surveillance Using Random Finite Set Theory. *ACM Trans. Cyber Phys. Syst.* 3(4): 42:1-42:22 (2019)

Li Feng, Jie Yang: A Novel Analysis of Delay and Power Consumption for Polling With PHY-Assisted Power Management. *IEEE Trans. Ind. Electron.* 65(4): 3610-3620 (2018)

Chaoqun Yang, Li Feng, Heng Zhang, Shibo He, Zhiguo Shi: A Novel Data Fusion Algorithm to Combat False Data Injection Attacks in Networked Radar Systems. *IEEE Trans. Signal Inf. Process. over Networks* 4(1): 125-136 (2018)

Li Feng, Jiguo Yu, Xiuzhen Cheng, Mohammed Atiquzzaman: A novel contention-on-demand design for WiFi hotspots. *Pers. Ubiquitous Comput.* 20(5): 705-716 (2016)

Li Feng, Jianqing Li, Xiaodong Lin: A New Delay Analysis for IEEE 802.11 PCF. *IEEE Trans. Veh. Technol.* 62(8): 4064-4069 (2013)

Li Feng, Jianqing Li: Integer-multiple-spacing-based scheduling for multimedia applications in IEEE 802.11e HCCA wireless networks. *Comput. Networks* 56(17): 3767-3782 (2012)

Patents

A Novel MAC Design for Wireless Hot-Spot Networks, US Patent 9,743,309 B2 and Australian patent 2015101690.

System Parameter Optimization for Delayed Channel Access Protocol, US Patent 9,769,849 B2 and Australian patent 2015101207.

A Novel Delay Analysis System and Method for a Polling Protocol with Power Management, Australia patent 2016102019.

Packetusher: Accelerating Computer-Intensive Packet Processing, US Patent 9,961,002 B2 and Australia patent 2015101807.

A High-Efficient Packet I/O Engine for Commodity PC, US Patent 10,001,930 B2 and Australia patent 2015101806.

Professional Certification and Awards

BOC Excellent Research Award in 2018.

Professional Society Membership

