# Associate Professor FENG, LI

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### Academic Qualification

Ph.D. degree Macau University of Science and TechnologyM. Phil. Degree The University of Hong KongB.S. Degree Shandong University

#### **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, Assitant Professor, Faculty of Information Technology, MUST Sep.2007 ~ Jun. 2013, Lecturer, Faculty of Information Technology, MUST

#### Academic Publication (selected)

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 Crowdsensingbased 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: Á 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.