JIALIN LIU

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RESEARCH INTERESTS

Wireless sensing, mobile computing, human-computer interaction, wireless networking

EDUCATION

Dalian University of Technology, Dalian, China　　　　　　　　　　　　　　　　　　2017–2022
Ph.D. in Software Engineering
Dissertation: The Research on Acoustic-Based Passive Sensing Methods on Smart Devices
Advisor: Prof. Lei Wang

Dalian University of Technology, Dalian, China　　　　　　　　　　　　　　　　　　2015–2017
M.Eng. in Software Engineering

Dalian University of Technology, Dalian, China　　　　　　　　　　　　　　　　　　2011–2015
B.Eng. in Software Engineering

EXPERIENCE

University of Massachusetts Amherst, Amherst, MA　　　　　　　　　　　　　　　　2019–2022
Visiting Scholar, Manning College of Information and Computer Sciences
Advisor: Prof. Jie Xiong

Dalian University of Technology, Dalian, China　　　　　　　　　　　　　　　　　　2015–2019
Research Assistant, Wireless Lab for Networking and Applications (WiLNA)
Advisor: Prof. Lei Wang

PUBLICATIONS

[1] D. Li, **J. Liu**, S. I. Lee, and J. Xiong, "LASense: Pushing the Limits of Fine-grained Activity Sensing Using Acoustic Signals" in *Proceedings of the ACM on Interactive, Mobile, Wearable and Ubiquitous Technologies* (**IMWUT/UbiComp '22**), 2022

[2] Z. Gao, A. Li, D. Li, **J. Liu**, J. Xiong, Y. Wang, B. Li, and Y. Chen, "MOM: Microphone based 3D Orientation Measurement" in *Proceedings of the 20th International Conference on Information Processing in Sensor Networks* (**IPSN '22**), 2022

[3] **J. Liu**, D. Li, L. Wang, and J. Xiong, "BlinkListener: "Listen" to Your Eye Blink Using Your Smartphone" in *Proceedings of the ACM on Interactive, Mobile, Wearable and Ubiquitous Technologies* (**IMWUT/UbiComp '21**), 2021

[4] D. Li, **J. Liu**, S. I. Lee, and J. Xiong, "FM-track: pushing the limits of contactless multi-target tracking using acoustic signals" in *Proceedings of the 18th Conference on Embedded Networked Sensor Systems* (**SenSys '20**), 2020

[5] Z. Qin, Y. Sun, J. Hu, W. Zhou, and **J. Liu**, "Enhancing efficient link performance in ZigBee under cross-technology interference", *Mobile Networks and Applications*, vol. 25, no. 1, pp. 68–81, 2020

[6] L. Guo, L. Wang, C. Lin, **J. Liu**, B. Lu, J. Fang, Z. Liu, Z. Shan, J. Yang, and S. Guo, "Wiar: A public dataset for wifi-based activity recognition", *IEEE Access*, vol. 7, pp. 154935–154945, 2019

[7] B. Lu, L. Wang, **J. Liu**, W. Zhou, L. Guo, M.H. Jeong, S. Wang, and G. Han, "LaSa: location aware wireless security access control for IoT systems", *Mobile Networks and Applications*, vol. 24, no. 3, pp. 748–760, 2019

[8] L. Sun, L. Wang, J. Fang, **J. Liu**, and C. Ma, "MIHBS: A Mobile Interface of High Bandwidth for Wireless Sensor Networks", *IEEE Access*, vol. 7, pp. 8235–8244, 2018

[9] **J. Liu**, L. Wang, J. Fang, L. Guo, B. Lu, and L. Shu, "Multi-Target Intense Human Motion Analysis and Detection Using Channel State Information", *Sensors*, vol. 18, no. 10, pp. 3379, Oct. 2018.

[10] W. Zhou, L. Wang, B. Lu, N. Jin, L. Guo, **J. Liu**, H. Sun, and H. Liu, "Unmanned aerial vehicle detection based on channel state information" in *IEEE International Conference on Sensing, Communication and Networking* (**SECON '18** Workshops), 2018

[11] J. Fang, L. Wang, Z. Qin, **J. Liu**, and B. Lu, "GCC: Group-based CSI feedback compression for MU-MIMO networks", Mobile Networks and Applications, vol. 23, no. 3, pp. 407–418, 2018

[12] L. Guo, L. Wang, **J. Liu**, W. Zhou, and B. Lu, "HuAc: Human activity recognition using crowdsourced WiFi signals and skeleton data", Wireless Communications and Mobile Computing, vol. 2018, 2018

[13] **J. Liu**, L. Wang, L. Guo, J. Fang, B. Lu, and W. Zhou, "A Research on CSI-based human Motion Detection in Complex Scenarios" in *IEEE 19th International Conference on e-Health Networking, Applications and Services* (**Healthcom '17**), 2017

[14] L. Guo, L. Wang, **J. Liu**, W. Zhou, B. Lu. T. Liu, G. Li, and C. Li, "A novel benchmark on human activity recognition using WiFi signals" in *IEEE 19th International Conference on e-Health Networking, Applications and Services* (**Healthcom '17**), 2017

[15] J. Fang, L. Wang, Z. Qin, **J. Liu**, and B. Lu, "LFC: Adaptive location-based CSI feedback compression for MU-MIMO networks" *in International Smart Cities Conference* (ISC2), 2017

[16] L. Guo, L. Wang, **J. Liu**, and W. Zhou, "A survey on motion detection using WiFi signals" in *12th International Conference on Mobile Ad-Hoc and Sensor Networks* (MSN), 2016

PROFESSIONAL SERVICES

Shadow Program Committee, SenSys 2022	2022

HONORS & AWARDS

Duke ECE Diversity Award	2022
CSC Scholarship	2019
Technological Innovation Individual Award	2018
China Graduate Contest on Application, Design and Innovation of Mobile-Terminal, Second Prize	2017
China National Scholarship of Graduates	2015
Mitsubishi Chemical Scholarship	2013