

# 杨丰旭 Fengxu Yang

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## RESEARCH INTERESTS

His research primarily focuses on LiDAR-centric perception and the security and privacy of autonomous driving systems. Previously, he worked on wireless network coexistence, heterogeneous networking, and cross-technology communication to enable robust connectivity for embedded devices.

## EDUCATION

<b>ShanghaiTech University</b> Ph.D. in Computer Science and Technology Supervisor: Zhice Yang	Sep. 2022 - Present
<b>ShanghaiTech University</b> M.S. in Information and Communication Engineering Supervisor: JianMing Wei	Sep. 2019 - July 2022
<b>North University of China</b> BEng. of Information Countermeasure Technology	Sep. 2014 - July 2018

## PUBLICATIONS

### Conference & Workshop:

- (RAID'25, CCF-B, Core A)** Fengxu Yang, Yihui Yan, Paizhuo Chen, Zhice Yang, "An In-model Spy in Edge Intelligence", The 28th International Symposium on Research in Attacks, Intrusions and Defenses, 2025
- (Sensys'25, CCF-B, Core A\*)** Fengxu Yang, Zaizhou, Jiaqi Zhou, Zhice Yang. "LiDARMarker: Machine-friendly Road Markers for Smart Driving Systems", The 23rd ACM Conference on Embedded Networked Sensor Systems, 2025
- (INFOCOM'25, CCF-A, Core A\*)** Si Liao, Fengxu Yang, Huangxun Chen, Zhice Yang. "Enable Autonomous Backscatter in Everyday Devices", IEEE International Conference on Computer Communications, 2025
- (IPSN'22, CCF-B, Core A\*)** Fengxu Yang, Pei Tian, Xiaoyuan Ma, Carlo Alberto Boano, Ye Liu, Jianming Wei. "EMU: Increasing the Performance and Applicability of LoRa through Chirp Emulation, Snipping, and Multiplexing", The 21st ACM/IEEE International Conference on Information Processing in Sensor Networks, 2022
- (Sensys'21, CCF-B, Core A\*)** Pei Tian, Fengxu Yang, Xiaoyuan Ma, Carlo Alberto Boano, Xin Tian, Ye Liu, Jianming Wei. "Dataset: Environmental Impact on the Long-Term Connectivity and Link Quality of an Outdoor LoRa Network", The 19th ACM Conference on Embedded Networked Sensor Systems, 2021
- (EWSN'21, Core A)** Pei Tian, Xiaoyuan Ma, Carlo Alberto Boano, Ye Liu, Fengxu Yang, Xin Tian, Dan Li, Jianming Wei, "ChirpBox: An Infrastructure-Less LoRa Testbed", The International Conference on Embedded Wireless Systems and Networks, 2021

### Journal:

- (Sensors'21)** Qingjie Guo, Fengxu Yang, Jianming Wei, "Experimental Evaluation of the Packet Reception Performance of LoRa", Sensors, 2021, 21(4): 1071.

### Demo & Poster:

- (Sensys'25)** Zaizhou Yang, Yihui Yan, Fengxu Yang, Zhice Yang, "Demo Abstract: Using Fingerprint Scanner for On-Body Messaging", The 23rd ACM Conference on Embedded Networked Sensor Systems, 2025
- (Sensys'25)** Yihong Hang, Hao Li, Huangxun Chen, Fengxu Yang, Zhice Yang, "LLM-Piloted Visual Privacy Agent on Mobile Systems", The 23rd ACM Conference on Embedded Networked Sensor Systems, 2025
- (EWSN'22)** Fengxu Yang, Pei Tian, Xiaoyuan Ma, Carlo Alberto Boano, Ye Liu, Jianming Wei. "Demo: Real-Time Decoding of LoRa Packets Without Prior Knowledge of their Spreading Factor", The International Conference on Embedded Wireless Systems and Networks, 2022
- (EWSN'21)** Xiaoyuan Ma, Dan Li, Fengxu Yang, Carlo Alberto Boano, Pei Tian, Jianming Wei. "Poster: Chirpbox-A Low-Cost LoRa Testbed Solution", The International Conference on Embedded Wireless Systems and Networks, 2020

**Patent:**

1. **Fengxu Yang**, Yu An, Bobo Zhou, Shaoyu Wang, Huitong Fu, “Elderly Mobility aid Monitoring Device Based on the BeiDou Satellite Navigation System.” CN206479642U Granted

**HONORS & AWARDS**

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- ACM CPS-IoT Week Student Travel Grant, 2025
- SIST Outstanding Teaching Assistant, 2023
- The 2<sup>nd</sup> prize of 6<sup>th</sup> Future Network Development Conference, 2022
- EWSN Best Paper Nominee, 2021
- EWSN Best Poster, 2020
- The 3<sup>rd</sup> prize of International Water Robot Competition, 2017
- The 1<sup>st</sup> prize Shanxi Undergraduate Electronic Design Competition, 2016
- The 3<sup>rd</sup> prize of National Intelligent Things Association Competition, 2016
- The 3<sup>rd</sup> prize of International Water Robot Competition, 2016
- The 3<sup>rd</sup> prize of China Robot Competition, 2016
- The 1<sup>st</sup> prize of International Water Robot Competition, 2015
- The 2<sup>nd</sup> prize of National Undergraduate Electronic Design Competition, 2015
- The 2<sup>nd</sup> prize of Robot Competition in North China, 2015

**TEACHING EXPERIENCE**

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**Teaching Assistant**

Wireless and Mobile System (CS222) 2024

Computer Network (CS120) 2022, 2023

Introduction of Information Science and Technology (SI100B) 2020

**PROFESSIONAL SERVICE**

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**Reviewer**

IEEE International Conference on Mobile Ad-Hoc and Smart Systems (MASS), Reviewer, 2023