

杨丰旭 Fengxu Yang

Room 1C-407, SIST Building
ShanghaiTech University
Shanghai, China

yangfx@shanghaitech.edu.cn
+86 199 1694 5970
<https://fengxuyang.com/>

RESREARCH 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

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

PUBLICATIONS

Conference & Workshop:

1. **(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
2. **(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
3. **(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
4. **(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
5. **(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
6. **(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:

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

Demo & Poster:

1. **(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
2. **(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
3. **(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
4. **(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

- ACM CPS-IoT Week Student Travel Grant, 2025
- SIST Outstanding Teaching Assistant, 2023
- 2nd place at the 2022 Lights of Future – Future Network Technology and Innovation Competition, 2022
- EWSN Best Paper Nominee, 2021
- EWSN Best Poster, 2020
- The 3rd prize of International Water Robot Competition, 2017
- The 1st prize Shanxi Undergraduate Electronic Design Competition, 2016
- The 3rd prize of National Intelligent Things Association Competition, 2016
- The 3rd prize of International Water Robot Competition, 2016
- The 3rd prize of China Robot Competition, 2016
- The 1st prize of International Water Robot Competition, 2015
- The 2nd prize of National Undergraduate Electronic Design Competition, 2015
- The 2nd prize of Robot Competition in North China, 2015

TEACHING EXPERIENCE

Teaching Assistant

Wireless and Mobile System (CS222) 2024

Computer Network (CS120) 2022, 2023

Introduction of Information Science and Technology (SI100B) 2020

PROFESSIONAL SERVICE

Reviewer

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