

Xinyuan Wei

weixy2022@mail.sustech.edu.cn | weixinyuan.cc

EDUCATION

- **Southern University of Science and Technology** Sep 2022 – Present
Ph.D. Student in Computer Science Shenzhen, China
 - Advisors: Prof. Weijie Yuan and Prof. Rui Wang
- **Southern University of Science and Technology** Sep 2018 – Jul 2022
Bachelor of Engineering (B.Eng.) in Communication Engineering Shenzhen, China
 - Advisor: Prof. Rui Wang

JOURNAL ARTICLES

1. **Xinyuan Wei**, Weijie Yuan, Kecheng Zhang, Qin Tao, Fan Liu, and Rui Wang, "OTFSensi: OTFS Sensing for Human Activity Recognition in Future 6G Networks," *IEEE Transactions on Mobile Computing*, vol. 25, no. 6, pp. 8467–8479, 2026, doi: [10.1109/TMC.2025.3649769](https://doi.org/10.1109/TMC.2025.3649769).
2. Guixiong Chen, Hongjia Huang, **Xinyuan Wei**, Ruizhi Ruan, Yuanhao Cui, and Weijie Yuan, "Robust and Extensible Multi-Branch Semantic Communication in LAWNs: Deployment-Efficient Design With SDR-Based Validation," *IEEE Transactions on Mobile Computing*, vol. 25, no. 6, pp. 8327–8339, 2026, doi: [10.1109/TMC.2025.3648621](https://doi.org/10.1109/TMC.2025.3648621).
3. Chao Yu, Lu Li, **Xinyuan Wei**, Zezhong Zhang, and Rui Wang, "FOCUS: Outdoor Transmitter Localization Exploiting the Mobility of a Single Drone," *IEEE Wireless Communications Letters*, vol. 15, pp. 4080–4084, 2026, doi: [10.1109/LWC.2026.3712042](https://doi.org/10.1109/LWC.2026.3712042).
4. **Xinyuan Wei**, Weijie Yuan, Kecheng Zhang, and Fan Liu, "OTFS-Assisted ISAC System: Delay Doppler Channel Estimation and SDR-Based Implementation," *IEEE Transactions on Mobile Computing*, vol. 24, no. 11, pp. 11865–11878, 2025, doi: [10.1109/TMC.2025.3582421](https://doi.org/10.1109/TMC.2025.3582421).
5. Jun Wu, Yuye Shi, Weijie Yuan, Qingqing Cheng, Buyi Li, and **Xinyuan Wei**, "SDR-Empowered Environment Sensing Design and Experimental Validation Using OTFS-ISAC Signals," *IEEE Transactions on Mobile Computing*, vol. 24, no. 11, pp. 12252–12263, 2025, doi: [10.1109/TMC.2025.3581716](https://doi.org/10.1109/TMC.2025.3581716).

CONFERENCE PAPERS

1. Yuye Shi, Buyi Li, **Xinyuan Wei**, and Hongjia Huang, "Experimental Implementation of an OTFS-Based ISAC System," in *2024 IEEE/CIC International Conference on Communications in China (ICCC Workshops)*, 2024, pp. 587–592, doi: [10.1109/ICCCWorkshops62562.2024.10693814](https://doi.org/10.1109/ICCCWorkshops62562.2024.10693814).
2. **Xinyuan Wei**, Weijie Yuan, Feifei Gao, and Guangjie Han, "Parameter-Inherited Delay Doppler Channel Estimation Based on Unitary AMP," in *GLOBECOM 2023 - 2023 IEEE Global Communications Conference*, 2023, pp. 4182–4187, doi: [10.1109/GLOBECOM54140.2023.10436978](https://doi.org/10.1109/GLOBECOM54140.2023.10436978).
3. **Xinyuan Wei**, Lingyan Zhang, Weijie Yuan, Fan Liu, Shuangyang Li, and Zhiqiang Wei, "SDR System Design and Implementation on Delay-Doppler Communications and Sensing," in *2023 IEEE Wireless Communications and Networking Conference (WCNC)*, 2023, pp. 1–6, doi: [10.1109/WCNC55385.2023.10118889](https://doi.org/10.1109/WCNC55385.2023.10118889).

HONORS AND AWARDS

- **Freshman Scholarship** 2018
Southern University of Science and Technology
- **Outstanding Graduate Student Award** 2023
Southern University of Science and Technology
- **Outstanding Graduate Student Award** 2025
Southern University of Science and Technology
- **Second Place** 2025
China University Aircraft Design Innovation Competition

ACADEMIC SERVICE

- **Conference reviewer:** IEEE GLOBECOM 2026; IEEE SPAWC 2026.
- **Journal reviewer:** OJCOMS; CL; TCCN; TMC; TVT (Special Issue); WCL.

PROFESSIONAL AFFILIATIONS

- **IEEE Student Member** 2023 – Present
- **IEEE Communications Society Membership** 2024 – Present