

Name: Ziqiang Wang

Birth Date: 1994.10.15

Nationality: China

Mail: ziqiangwang518@std.uestc.edu.cn
ziqiang.wang@tuni.fi



Education

- **Visiting Scholar**, Major in Integrated Sensing and Communication, co-supervised by **Prof. Mikko Valkama**, Tampere Wireless Research Center, Tampere University, Tampere, Finland, 2022.10-2024.05.
- **MSc. and PhD.**, Major in Information and Communication Engineering, supervised by **Prof. Qun Wan**, Radar and Positioning Group, UESTC, Chengdu, China, 2017-2019-2024.06.
- **B.E.**, Major in Electronic and Information Engineering, UESTC, Chengdu, China, 2012-2016.

Research Interests

- **Direct position determination**, Indoor positioning, Array signal processing, Joint angle and delay estimation, Quantized signal processing, Deep unfolding technique, Near-field localization and sensing

Publications

- **(First Author):** Wang, Ziqiang, et al. "Majorization–Minimization Based Direct Localization Using One-Bit Channel Measurements." **IEEE Wireless Communications Letters** (2024).
- **(First Author):** Wang, Ziqiang, et al. "An Iterative Direct Position Determination Approach Based on Doppler Frequency Shifts." **IEEE Transactions on Vehicular Technology** (2023).
- **(First Author):** Wang, Ziqiang, et al. "Beamspace Joint Azimuth, Elevation and Delay Estimation for Large-Scale MIMO-OFDM System" **IEEE Transactions on Instrumentation and Measurement** (2023).
- **(First Author):** Wang, Ziqiang, et al. "A Modest Power Consumption Maximum Likelihood Direct Position Determination Approach for Multiple Targets with Moving Sensor Arrays." **IEEE Sensors Journal** (2022).
- **(First Author):** Wang, Ziqiang, et al. "A Computationally Efficient Direct Position Determination Algorithm Based on OFDM System." **IEEE Communications Letters** (2022).
- **(Third Author):** Wang, Ziqiang, et al. "Fast copula-based fusion of correlated decisions for distributed radar detection." **Signal Processing** (2022).

Representative Project

- 5G high accuracy indoor position project using channel state information, 2019.9-2020.9

Target: TDOA localization assisted by angle information, the position estimation error of 90% real data $\leq 20\text{cm}$

Solution: direction position determination and optimal beam selection to mitigate the impact of multipath

Award

- The National First Prize of the Fifteenth National Post-Graduate Mathematical Contest in Modeling, 2018.11

Skill

- Matlab, Python, Pytorch, Linux