Name: Ziqiang Wang Birth Date: 1994.10.15 Nationality: China

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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≤20cm **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