Wei Wang, Ph.D. candidate

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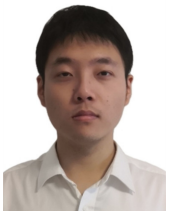

Education

2021 – now **Ph.D. (with CSC scholarship)**, *University of Bristol, UK*,
in Electrical and Electronic Engineering,
Research area: *Reconfigurable intelligent surface*,
Supervisor: Prof. Angela Doufexi & Prof. Mark A. Beach.

2020 – 2021 **M.Sc. (with Distinction)**, *University of Bristol, UK*,
in Wireless Communications and Signal Processing.

2016 – 2020 **B.Eng.**, *Tianjin University of Technology, China*,
in Radio Wave Propagation and Antennas.

Experience

2021 – 2024 **Teaching Assistant**, *University of Bristol, UK*,
1 semester for UG Electronics 2 (EENG26000),
3 semester for PG Principles of Communication Systems (EENGM0033),
1 semester for UG&PG Numerical Methods in Matlab (EMAT20920).

2022.03 – 2022.08 **Research Assistant**, *University of Bristol, UK*,
Project WP3: Reconfigurable Intelligent Surface, the Innovate UK/CELTIC-NEXT European collaborative research and development project on AIMM (AI-enabled Massive MIMO).

2022.06 – 2022.07 **Research Assistant**, *University of Bristol, UK*,
Satellite Passive Radar Propagation Analyst, Faculty of Engineering.

Research Publications

In progress & Under review

1. "A simultaneously transmitting and reflecting (STAR) RIS for bidirectional transmission with reconfigurable power splitting," **Under development** for an antenna conference and IEEE TAP.
2. **W. Wang**, X. Ou, Z. Ren, W. B. Abbas, S. Dang, A. Doufexi, and M. A. Beach, "Analysis on energy efficiency of RIS-assisted multiuser downlink near-field communications," *IEEE Transactions on Communications*, **Major revision**.
3. **W. Wang**, P. Li, A. Doufexi, and M. A. Beach, "A heuristic-integrated DRL approach for phase optimization in large-scale RISs," *IEEE Communications Letters*, **Rejected - Resubmission allowed**.

During PhD

1. **W. Wang**, A. Doufexi, and M. A. Beach, "Integer-based pattern synthesis for asymmetric multi-reflection RIS," in *Proc. IEEE Wireless Communications and Networking Conference (WCNC)*, Dubai, UAE, Apr. 2024, pp. 1–6. DOI: 10.1109/WCNC57260.2024.10571319.
2. **W. Wang**, P. Li, A. Doufexi, and M. A. Beach, "DRL-based sidelobe suppression for multi-focus reconfigurable intelligent surface," in *Proc. 18th European Conference on Antennas and Propagation (EuCAP)*, Glasgow, UK, Mar. 2024, pp. 1–5. DOI: 10.23919/EuCAP60739.2024.10500993.

3. **W. Wang**, P. Li, A. Doufexi, and M. A. Beach, "A DRL-based reflection enhancement method for RIS-assisted multi-receiver communications," in *Proc. IEEE 98th Vehicular Technology Conference (VTC2023-Fall)*, Hong Kong, PRC, Oct. 2023, pp. 1–6. DOI: 10.1109/VTC2023-Fall60731.2023.10333524.

Before PhD

1. G. Wang, X. Xuan, D. Jiang, K. Li, and **W. Wang**, "A miniaturized implantable antenna sensor for wireless capsule endoscopy system," *AEU-International Journal of Electronics and Communications*, vol. 143, p. 154 022, Jan. 2022. DOI: 10.1016/j.aeue.2021.154022.
2. Q. Shi, X. Xuan, H. Nie, Z. Wang, and **W. Wang**, "Antenna sensor based on AMC array for contactless detection of water and ethanol in oil," *IEEE Sensors Journal*, vol. 21, no. 19, pp. 21 503–21 510, Oct. 2021. DOI: 10.1109/JSEN.2021.3102294.
3. **W. Wang**, X. Xuan, W. Zhao, and H. Nie, "An implantable antenna sensor for medical applications," *IEEE Sensors Journal*, vol. 21, no. 13, pp. 14 035–14 042, Jul. 2021. DOI: 10.1109/JSEN.2021.3068957.
4. **W. Wang**, X. Xuan, P. Pan, Y. Hua, H. Zhao, and K. Li, "A low-profile dual-band omnidirectional alford antenna for wearable WBAN applications," *Microwave and Optical Technology Letters*, vol. 62, no. 5, pp. 2040–2046, May 2020. DOI: 10.1002/mop.32270.
5. Q. Wu, X. Xuan, **W. Wang**, K. Li, and H. Zhao, "A miniaturized implantable planar inverted-F antenna for biotelemetry applications at 2.45 GHz industrial, scientific, and medical band," *Microwave and Optical Technology Letters*, vol. 62, no. 1, pp. 391–396, Jan. 2020. DOI: 10.1002/mop.32022.

Skills

Programming	MATLAB, Python, C, LaTeX.
Antenna Design	CST Studio Suite, Ansys HFSS.
Languages	English, Mandarin Chinese.

Service

2023 – 2025 **Reviewer**, *IEEE TVT, IEEE VTC 2025, IEEE ICC 2024, IEEE ICCC 2024.*