HAN WANG

Ph.D. candidate at State Key Lab of CAD&CG, Zhejiang University

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EDUCATION

Ph.D. in Computer Science

State Key Lab of CAD&CG, Zhejiang University

Sep. 2019 – June 2024 (expected) Hangzhou, Zhejiang

B.Eng. in Software Engineering

CS College, Wuhan University

Sep. 2015 – June 2019 Wuhan, Hubei

PUBLICATIONS

First-Author Publications

- **H. Wang**, R. Zhang, Y. Shen, C. Ding, Y. Zhao, and H. Lin, "Isogeometric analysis for the scattering of NURBS surfaces with coinciding knots," in *2023 IEEE International Symposium on Antennas and Propagation and USNC-URSI Radio Science Meeting (APS/URSI) (accepted)*, IEEE.
- **H. Wang**, Z. Qiang, and H. Lin, "A quasi-optimal shape design method for electromagnetic scatterers based on NURBS surfaces and filter-enhanced GWO," *IEEE Transactions on Antennas and Propagation*, 1–1 (early access), 2023.
- **H. Wang**, M. Pang, and H. Lin, "Enhanced solution to the surface-volume-surface EFIE for arbitrary metal-dielectric composite objects," *Frontiers of Information Technology & Electronic Engineering*, pp. 1–12, 2022.
- **H. Wang**, M. Pang, and H. Lin, "Accuracy improvement of the algebraic fast methods for the volume-surface integral equation," in *2021 IEEE International Symposium on Antennas and Propagation and USNC-URSI Radio Science Meeting (APS/URSI)*, IEEE, 2021, pp. 1421–1422.
- **H. Wang**, N. Wu, and H. Lin, "Solving the scattering of combined conductor-dielectric bodies based on EPA," in *2020 IEEE International Symposium on Antennas and Propagation and North American Radio Science Meeting*, IEEE, 2020, pp. 2067–2068.
- **H. Wang**, C. Luo, and H. Lin, "Electromagnetic characteristics optimization based on shape deformation," in *2019 International Applied Computational Electromagnetics Society Symposium-China (ACES)*, IEEE, vol. 1, 2019, pp. 1–2.

Second-Author Publications

- R. Zhang, **H. Wang**, Y. Shen, X. Yin, L. Yang, and H. Lin, "Computation of the physical optics integral on T-spline surfaces," in *2023 Photonics & Electromagnetics Research Symposium (accepted)*, IEEE.
- L. Yang, **H. Wang**, M. Pang, Y. Jiang, and H. Lin, "Deep learning with attention mechanism for electromagnetic inverse scattering," in *2022 IEEE International Symposium on Antennas and Propagation and USNC-URSI Radio Science Meeting (AP-S/URSI)*, 2022, pp. 1712–1713.

RESEARCH INTERESTS

I am currently a fourth-year Ph.D. candidate at college of computer science and technology of Zhejiang University, China. I am supervised by Professor Hai Lin at the State Key Laboratory of CAD&CG. My research focuses on (1) fast numerical algorithms based on physical and algebra theories, (2) isogeometric analysis for unifying geometric design and electromagnetic simulation, and (3) efficient shape optimization assisted by machine learning.

SKILLS

CEM Algorithms ●●●●●
MoM, MLFMA, FEM, PO

CAD Modeling ●●●●●
B-splines, NURBS

Programming ●●●●○
C/C++, Python

AWARDS

2022

- **Outstanding Graduate Award**
  Zhejiang University

2021

- **Third Prize**
  2021 ACES Student Modeling Contest
- **Outstanding Graduate Cadre Award**
  Zhejiang University
- **Outstanding Graduate Award**
  Zhejiang University

2020

- **Outstanding Graduate Award**
  Zhejiang University

ACTIVITIES

2023

- **Reviewer** for IEEE AP-S/URSI 2023

2022

- **Reviewer** for IEEE AP-S/URSI 2022

- M. Pang, **H. Wang**, and H. Lin, "A GPU-based radio wave propagation prediction with progressive processing on point cloud," *IEEE Antennas and Wireless Propagation Letters*, vol. 20, no. 6, pp. 1078–1082, 2021.
- M. Pang, **H. Wang**, and H. Lin, "Iterative MLFMA-MADBT technique for analysis of antenna mounted on large platforms," *Applied Sciences*, vol. 11, no. 1, p. 148, 2020.

Other Publications

- C. Ding, L. Yang, R. Zhang, *et al.*, "Mesh simplification method based on Monto-Carlo algorithm," in *2023 Photonics & Electromagnetics Research Symposium (accepted)*, IEEE.
- Y. Li, L. Zheng, **H. Wang**, and H. Lin, "Using view frustum structure for beam tracing acceleration," in *2022 IEEE International Symposium on Antennas and Propagation and USNC-URSI Radio Science Meeting (AP-S/URSI)*, 2022, pp. 1924–1925.

2021

- **Presentation** at IEEE AP-S/URSI 2021

2020

- **Presentation** at IEEE AP-S/URSI 2020

2019

- **Presentation** at IEEE ACES 2019