

# Yongtai Yin

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## Research Interests

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Optimization for Signal Processing, Model-Based Deep Learning, Generative Models, Wireless Sensing

## Education

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**The Chinese University of Hong Kong (CUHK)**

*Ph.D. Student in Electronic Engineering*

○ Supervisor: Wing-Kin Ma

**Hong Kong SAR**

*2024 – Present*

**Northwestern Polytechnical University (NWPU)**

*M.Eng. in Information and Communication Engineering*

○ Supervisors: Ling Wang and Yuexian Wang

**Xi'an, China**

*2021 – 2024*

**Northwestern Polytechnical University (NWPU)**

*B.Eng. in Communication Engineering*

**Xi'an, China**

*2017 – 2021*

## Publications

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- **Y. Yin**, J. Liu, W.-K. Ma\*, “Error Bound Based Exact Penalization for Cardinality-Constrained Clustering,” in *Proc. Int. Conf. Acoust. Speech Signal Process. (ICASSP)*, 2026
- **Y. Yin**, Y. Wang\*, T. Dai, et al. “DOA Estimation Based on Smoothed Sparse Reconstruction with Time-Modulated Linear Arrays,” *Signal Process.*, 2024 [\[DOI\]](#)
- **Y. Yin**, Y. Wang\*, Y. Gong, et al. “Joint Multipath Channel Estimation and Array Channel Inconsistency Calibration for Massive MIMO Systems,” *IEEE Internet Things J.*, 2024 [\[DOI\]](#)
- Y. Wang, M. S. Obaidat, **Y. Yin**, et al. “Robust Sparse Direct Localization of Smart Vehicle With Partly Calibrated Time Modulated Arrays,” *IEEE Trans. Intell. Transp. Syst.*, 2023 [\[DOI\]](#)
- **Y. Yin**, Y. Wang\*, Y. Gong, et al. “Biquaternion-Based DOA Estimation of Noncircular Signals with Time-Modulated Antenna Arrays,” *AEU Int. J. Electron. Commun.*, 2023 [\[DOI\]](#)

## Technical Skills

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<b>Expertise</b>	Matrix Analysis, Optimization, Statistical & Array Signal Processing
<b>Programming</b>	Python (PyTorch, NumPy, SciPy), MATLAB, C/C++
<b>Tools</b>	Git, Linux/Shell, $\text{\LaTeX}$

## Honors & Awards

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- **Postgraduate Studentship**, CUHK, 2024 – Present
- **Outstanding Master's Thesis**, NWPU, 2024
- **Outstanding Graduates** (Postgraduates & Undergraduates), NWPU, 2024 & 2021