Fan Yang

Homepage: fanyang-uoft.github.io Email: yangf19@tsinghua.org.cn

EDUCATION

• University of Toronto

Toronto, Canada

Doctor of Philosophy - Electrical and Computer Engineering

September 2024 - Present

Supervisor: Prof. Ben Liang

• Tsinghua University

Beijing, China

Master of Engineering - Electronics and Communication Engineering

September 2019 - July 2022

Supervisor: Prof. Yuhan Dong

• Sun Yat-sen University

Guangzhou, China

Bachelor of Engineering - Telecommunication Engineering

September 2015 - July 2019

 $\textbf{Supervisor} : \ Prof. \ Xiang \ Chen$

RESEARCH INTERESTS

Wireless communications, digital signal processing, machine learning.

PUBLICATIONS

- 1. **F. Yang**, J. Wang, and Y. Dong, "Physical-Layer Security for Indoor VLC Wiretap Systems Under Multipath Reflections," *IEEE Transactions on Wireless Communications*, vol. 21, no. 12, pp. 11179-11192, Dec. 2022.
- 2. **F. Yang** and Y. Dong, "Joint Probabilistic Shaping and Beamforming Scheme for MISO VLC Systems," *IEEE Wireless Communications Letters*, vol. 11, no. 3, pp. 508-512, Mar. 2022.
- 3. F. Yang, K. Zhang, Y. Zhai, J. Quan, and Y. Dong, "Artificial Noise Design in Time Domain for Indoor SISO DCO-OFDM VLC Wiretap Systems," *Journal of Lightwave Technology*, vol. 39, no. 20, pp. 6450-6458, Oct. 2021.
- 4. **F. Yang**, K. Zhang, Y. Zhai, and Y. Dong, "Nonlinear HPA Impact on Artificial Noise Aided MISO Secure Systems," in *Proc. IEEE International Conference on Communications (ICC)*, Montreal, QC, Canada, Jun. 2021, pp. 1–6.

Honors and Awards

• Outstanding Thesis Award: Tsinghua University (TOP 5%)

 $June\ 2022$

• National Scholarship: Tsinghua University (TOP 1%)

October 2021

• First Prize: Sun Yat-sen Undergraduate Electronic Design Contest

December 2015

TEACHING ASSISTANT EXPERIENCE

• Signals and Systems

Winter 2025

• Engineering Probability and Statistics

Fall 2023

• Wireless Communication Engineering

Fall 2021, Fall 2020

Work Experience

• The University of British Columbia

Research Assistant

January 2023 - December 2023

• Huawei Technologies Co., Ltd.

Signal Processing Algorithm Engineer

July 2022 - December 2022

SKILLS

- Knowledge: Communication Theory, Information Theory, Optimization Theory, Signal Processing, Deep Learning.
- Programming: MATLAB, Python, C++, GNU Radio