

# YILUN ZHU

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## EDUCATION

**University of Michigan – Ann Arbor** Aug. 2020 - Present  
 M.S. and Ph.D. in Electrical & Computer Engineering GPA: 4.0/4.0  
 Track: Signal & Image Processing and Machine Learning  
 Advisor: Clayton Scott

**Shanghai Jiao Tong University (SJTU)** Sept. 2016 - Aug. 2020  
 University of Michigan - Shanghai Jiao Tong University Joint Institute (JI)  
 B.S. in Electrical & Computer Engineering Minor in Data Science GPA: 3.7/4.0

Honors and awards:  
 Outstanding TA Award (Top 5 TAs in JI), National Scholarship (Top 1 % in SJTU), Dean's List

## PUBLICATION

B. Zhai, **Y. Zhu**, A. Tang and X. Wang, “*THzPrism*: Frequency-Based Beam Spreading for Terahertz Communication Systems,” in IEEE Wireless Communications Letters, vol. 9, no. 6, pp. 897-900, June 2020, doi: 10.1109/LWC.2020.2974468.

## RESEARCH EXPERIENCES

**Weakly Supervised Learning (with Application in Nuclear Source Detection)** Jan 2021 - Present  
*Research Assistant, supervised by Prof. Clayton Scott*

- Developing mixture proportion estimation algorithm for learning from positive and unlabeled data
- Fusing sparsity with deep learning for radiation imaging

**Thesis Project: Portable Cargo Volume Measurement System** May 2020 - Aug. 2020  
*Sponsored by Panasonic Silver Award (Top3 /26 groups)*

**Glare Effects for Digital Images** May 2019 - Apr. 2020  
*Research Assistant, supervised by Prof. Yong Long Admitted to JI Honors Research Program*

**Object Sensing and Positioning for 5G Communication Systems** June 2018 - May 2020  
*Research Assistant, supervised by Prof. Xudong Wang and Dr. Bangzhao Zhai Co-authored a paper*

## INTERNSHIP

**Rockwell Automation - Research and Development (R&D) Center** Mar. 2019 - May 2019  
*Research Intern*

## TEACHING EXPERIENCES

**VE216 Signals & Systems** Spring 2019, Spring 2020, Summer 2020  
*Teaching Assistant, Instructor: Prof. Yong Long 2020 Outstanding TA Award*

**VP140 Physics I** Summer 2018  
*Teaching Assistant, Instructor: Prof. Mateusz Krzyzosiak*

## TECHNICAL STRENGTHS

**Computer Languages** C, C++, Python, Verilog HDL, Assembly, R, Julia  
**Softwares** MATLAB, Mathematica, HFSS, OMNet++, Wireshark, Pspice, L<sup>A</sup>T<sub>E</sub>X