

**Contact Details**

Name: Yachong Yang  
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**Current Address**

3900 Chestnut Street, Apt 908, Philadelphia, PA 19104

**Education**

- The Wharton School, University of Pennsylvania** Aug. 2019 – May. 2024(Expected)  
 Ph.D in Statistics  
 GPA: 4.0/4.0
- University of Science and Technology of China (USTC)** Sept. 2015 – June 2019  
 School of the Gifted Young \* , B.S. in Statistics  
 GPA: 92.79/100 (3.97/4.0) Sum cum laude and with Distinction  
 Graduated with Guo Moruo Scholarship, the highest honor awarded to the top 1% of graduates each year

**Research Interests**

Machine Learning, Conformal Prediction, High-dimensional Statistics, Causal Inference

**Papers and Conferences**

- Yachong Yang, Arun Kuchibhotla, Eric Tchetgen Tchetgen, UPenn, 2022  
**Doubly robust counterfactual inference with conformal prediction**
  - Our works brings together transfer learning with missing data and causal inference
  - Organized and presented this work at Joint Statistical Meeting Invited Session 2022
  - Presentation at American Causal Inference Conference 2022
  - Under revision at Journal of Royal Statistical Society, Series B
- Weijie Su, Hua Wang, Yachong Yang, UPenn, 2022  
**Effect size heterogeneity matters in high dimensional variable selection**
  - Published in IEEE Transactions on Information Theory
- Yachong Yang, Arun Kuchibhotla, UPenn, 2021  
**Finite-sample efficient conformal prediction**
  - Presentation in ICML conference, DFUQ Workshop
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  - Under revision at Journal of the American Statistical Association
- Hua Wang, Yachong Yang, Zhiqi Bu, Weijie Su, UPenn, 2020  
**The Complete Lasso Trade-off Diagram**
  - Spotlight paper in NeurIPS conference 2020
  - Presentation in **Statistical Learning and Data Science Session** Joint Statistical Meetings 2020
- Qin Yu, Yang Li, Yachong Yang, Yumeng Wang, Zemin Zheng, USTC, 2019  
**Scalable and Efficient Inference for High-dimensional Confidence Intervals**
  - Published in Communications in Statistics - Theory and Methods

**Industry experience**

- Research Scientist Internship at Amazon Amazon, Summer 2022

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\*Founded in 1978, School of the Gifted Young of University of Science and Technology of China aims at educating top-notch students younger than regular students in China, usually from the age of 15 to 18.

- As part of the ASIN Forecasting team in the Supply Chain Optimization Technology (SCOT) at Amazon, my project involves leveraging the causal structure of Amazon’s supply chain system to improve prediction accuracy for Demand Forecast. I leveraged a newly proposed machine learning model using Additive Gaussian Processes to improve attribution results using Shapley values and prediction accuracy. To make my analysis more robust, I also applied ensembling methods such as bagging. My final result shows that causal structural information and statistical methods such as bias-correction could be combined to the effect that my proposed model improves statistical performance over 30% in terms of prediction accuracy, and at the same time retains interpretability.

## Experiences

- Teaching assistant Wharton Statistics and Data Science Department, UPenn
  - Stats 102: freshmen and sophomores Fall 2020 & Spring 2021
  - Stats 431 & 731: upperclassmen and MBAs Spring 2020
- Statistical consultant of **Statistics Clinic** at University of Cambridge Summer 2019
- Visiting research student University of Cambridge, Summer 2019
- Visiting research student Columbia University, Fall 2018

## Technical Skills & Certificates

- Software and Programming: R, Python, MATLAB, C, Mathematica,  $\LaTeX$ , SQL
- Certificate for laudable and dedicated teaching Wharton, 2022
- Certificate for completing the Data Science for All program Correlation One, 2022

## Honors and Awards

- Penn 3 Minute Thesis competition Finalist Award Mar. 2023
- Lawrence D. Brown Best Paper Award Nov. 2022
- Wharton research travel grant award Mar. 2022
- Winkelman Fellowship (awarded to one rising 3rd year PhD student annually who has shown the greatest research potential across all departments at Wharton) Jul. 2021
- Guo Moruo Scholarship (Highest honor awarded to undergraduates at USTC, top 1%) 2018
- Top 2% of American Mathematics Competition(AMC)12 2015
- 1st prize of Chinese Olympiad (Provincial Level) in Mathematics 2014
- 1st prize of Chinese Olympiad (Provincial Level) in Physics 2014