Current Address
Statistics Department of Wharton
University of Pennsylvania
427 Jon M. Huntsman Hall, 3730 Walnut Street, Philadelphia, PA 19104

Contact Details
Name: Yachong Yang
Gender: Female
Phone: +1(267)665-9764
Email: yachong@wharton.upenn.edu

Education

The Wharton School, University of Pennsylvania Aug. 2019 –current
Ph.D in Statistics
GPA: 4.0/4.0

School of the Gifted Young * **, USTC** Sept. 2015 – June 2019
B.S. in Statistics
GPA: 92.79/100 (3.97/4.0) Sum cum laude and with Distinction

Research Interests

High-dimensional Inference, Conformal Prediction, Multiple-hypothesis testing, Missing Data Analysis

Papers and conferences

- Presentation in the **DFUQ Workshop** ICML 2021
- Yachong Yang, Arun Kuchibhotla, **"Finite-sample Efficient Conformal Prediction"** under review

  We consider the problem of obtaining the smallest conformal prediction region given a family of machine learning algorithms and provide two general-purpose selection algorithms and consider coverage as well as width properties of the final prediction region.
- Presentation in **Statistical Learning and Data Science Session** Joint Statistical Meetings 2020
- Hua Wang, Yachong Yang, Zhiqi Bu, Weijie Su,
  "The Complete Lasso Trade-off Diagram" NeurIPS 2020, Spotlight

  We offer the first complete tradeoff diagram that distinguishes all pairs of FDR and power that can be asymptotically realized by the Lasso with some choice of its penalty parameter.
- Weijie Su, Hua Wang, Yachong Yang, **"The Price of Competition: Effect Size Heterogeneity Matters in High Dimensions"** under review

  We introduce a new notion called *effect size heterogeneity* and prove that the false and true positive rates achieve the optimal trade-off uniformly along the Lasso path when this measure is maximal. Moreover, we demonstrate that the first false selection occurs much earlier when effect size heterogeneity is minimal than when it is maximal.
- Yang Li, Yachong Yang, Zemin Zheng, **"Scalable and Efficient Inference for High-dimensional Confidence Intervals"** Communications in Statistics - Theory and Methods

Teaching and others

- TA at Wharton Statistics Department for Stats 102 Fall & Spring 2021
- TA at Wharton Statistics Department for Stats 431 & 731, teaching undergrads and MBAs Spring 2020
- Statistical consultant of **Statistics Clinic** at University of Cambridge Summer 2019
- Visiting research student at **Statistical Laboratory** at University of Cambridge Summer 2019

Technical Skills

- Softwares and Programming: R & MATLAB (experienced), Python, C, Mathematica,LaTeX

*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, usually from the age of 15 to 18.

Honors and Awards

- Winkelman Fellowship, awarded to one rising 3rd year PhD student annually who has shown the greatest academic job potential across all departments at Wharton July 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 Physics Olympiad (Provincial Level) 2014

References

- Prof. Weijie Su
  Department of Statistics, Wharton
  University of Pennsylvania
  Jon M. Huntsman Hall 3730 Walnut Street Philadelphia, PA 19104
  Email: `suw@wharton.upenn.edu`

- Prof. Richard J. Samworth
  Statistical Laboratory, Department of Pure Mathematics and Mathematical Statistics
  University of Cambridge
  Wilberforce Road, Cambridge, CB3 0WB
  Email: `r.samworth@statslab.cam.ac.uk`