

# JIAYI WANG

College Station, TX 77840  
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## EDUCATION

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### Texas A&M University

Ph.D. in Statistics

Advisor: Dr. Raymond K.W. Wong

Aug 2017 - Present

(GPA: 4.00/4.00 )

### Zhejiang University, China

B.S. in Statistics

Jul 2013 - Jun 2017

(GPA: 3.94/4.00 )

## RESEARCH INTERESTS

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- Functional Data
- Low-rank Modeling
- Causal Inference
- Reinforcement Learning

## PUBLICATIONS AND PREPRINTS

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- **Jiayi Wang**, Raymond K.W. Wong, Xiaojun Mao, and Kwun Chuen Gary Chan.(2021+). Matrix Completion with Model-free Weighting. *International Conference on Machine Learning (ICML)*, to appear. [Link](#)
- **Jiayi Wang**, Raymond K.W. Wong, Xiaoke Zhang.(2021+). Low-rank Covariance Function Estimation for Multidimensional Functional Data. *Journal of the American Statistical Association*, to appear. [Link](#)
- **Jiayi Wang**, Raymond K.W. Wong, Shu Yang, and Kwun Chuen Gary Chan.(2021). Estimation of Partially Conditional Average Treatment Effect by Hybrid Kernel-covariate Balancing. *arXiv*. [Link](#)
- **Jiayi Wang**, Raymond K.W. Wong, Mikyoung Jun, Courtney Schumacher, R Saravanan, Chunmei Sun.(2021). Statistical and Machine Learning Methods Applied to the Prediction of Different Tropical Rainfall Types. *Earth and Space Science Open Archive (ESSOAr)*. [Link](#)

## TEACHING

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### Instructor

- Stat 201: Elementary Statistical Inference Summer 2021
  - An introductory course that focuses on critical analysis of real-life statistics on concepts over mathematical computation.

### Teaching Assistant

- Stat 614: Probability for Statistics (graduate level) Fall 2021
- Stat 648: Applied Stat & Data Analysis (graduate level) Spring 2021
- Stat 612: Theory of Linear Models (graduate level) Fall 2020, Fall 2021
- Stat 404: Statistical Computing Spring 2020

## PROFESSIONAL EXPERIENCE

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### Internship

- Data Scientist Internship at Amazon, Modeling & Optimization Team Summer 2020
  - Constructed a predictive model for the late deliveries via Catboost and neural network modeling.
  - The predictive model is applied to the European delivery system to improve customer service.

### Research

- Research Assistant for the Department of Atmospheric Sciences, TAMU June 2018 - present
  - Explored multiple data compression methods, including PCA, auto-encoder, SDR to interpret high-dimensional atmospheric variables.
  - Explored various machine learning methods (Random Forest, lightGBM, and deep learning) to model tropical rain occurrence and rain amount.
  - Compared statistical models (generalized linear models) and machine learning methods in characterizing the tail of rain amount density.
- Global Engagement in Academic Research (GEAR) at NC State University Summer 2016
  - Developed time series models to analyze and predict the frequency of data breach.
  - Developed a Bayesian linear model to evaluate the size of data breach.

## PRESENTATIONS

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- Poster Presentation Summer 2021
  - International Conference on Machine Learning (ICML)
- Student Paper Award Talk Summer 2020
  - Joint Statistical Meetings (JSM)
- Student Research Talk Spring 2021
  - Stat Cafe at the Department of Statistics, TAMU

## AWARDS AND HONORS

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- Best Student's Paper Award 2020
  - Nonparametric Section, American Statistical Association(ASA)
- Endeavour Cheung Kong Student Exchange Program Awards 2016
  - University of Melbourne
- National Scholarship 2014
  - Zhejiang University
  - 2% winning rate

## TECHNICAL STRENGTHS

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### Languages

Mandarin, English

### Softwares & Tools

R, Python, C, Matlab, SQL, LaTeX