JIAYI WANG

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`https://jiayiwang1017.github.io`

EDUCATION

Texas A&M University   *Aug 2017 - May 2022 (Expected)*
Ph.D. in Statistics   (GPA: 4.00/4.00)
Advisor: Dr. Raymond K.W. Wong

Zhejiang University, China   *Jul 2013 - Jun 2017*
B.S. in Statistics   (GPA: 3.94/4.00)

AWARDS AND HONORS

· Emanuel Parzen Graduate Research Fellowship Award   2021
  Texas A&M University

· Best Student's Paper Award   2020
  Section on Nonparametric Statistics, American Statistical Association (ASA)

· Excellent Student   2017
  Zhejiang University

· Endeavour Cheung Kong Student Exchange Program Awards   2016
  University of Melbourne

· National Scholarship   2014
  Zhejiang University (2% winning rate)

PUBLICATIONS

· **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).* Link

· **Jiayi Wang**, Raymond K.W. Wong, and Xiaoke Zhang. (2021+). Low-rank Covariance Function Estimation for Multidimensional Functional Data. *Journal of the American Statistical Association.* Link

· **Jiayi Wang**, Raymond K.W. Wong, Mikyoung Jun, Courtney Schumacher, R Saravanan, and Chunmei Sun. (2021). Statistical and Machine Learning Methods Applied to the Prediction of Different Tropical Rainfall Types. *Environmental Research Communications.* Link

PREPRINTS

· **Jiayi Wang**, Zhengling Qi, and Raymond K.W. Wong. (2021). Projected State-action Balancing Weights for Offline Reinforcement Learning. *Submitted.* 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. *Submitted.* Link

TEACHING

Instructor
Texas A&M University

· Stat 201: Elementary Statistical Inference   Summer 2021

– Responsible for designing courses and exams, giving lectures, assigning grades and supervising the teaching assistant.

Teaching Assistant
Texas A&M University

· 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
· Stat 211: Principles of Statistics I   Fall 2017, Spring 2018

PROFESSIONAL EXPERIENCE

Internship

· Data Scientist Internship   Summer 2020
Modeling & Optimization, Amazon

– 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   Jun 2018 - present
Department of Atmospheric Sciences, Texas A&M University

– Explored multiple data compression methods, including principal component analysis, auto-encoder, sufficient dimension reduction 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)   Summer 2016
Department of Accounting, North Carolina State University

– Developed time series models to analyze and predicted the frequency of data breach.
– Developed a Bayesian linear model to evaluate the size of data breach.

PRESENTATIONS

· Low-rank Covariance Function Estimation for Multidimensional Functional Data   Fall 2022
Causality inference & Missing data analysis group, North Carolina State University

· Matrix Completion with Model-free Weighting   Summer 2021
Poster presentation, International Conference on Machine Learning (ICML)

· Low-rank Covariance Function Estimation for Multidimensional Functional Data   Spring 2021
  Stat Cafe at the Department of Statistics, Texas A&M University

· Low-rank Covariance Function Estimation for Multidimensional Functional Data   Summer 2020
  Student paper award talk, Joint Statistical Meetings (JSM)

· Analysis of Characteristics of Data Breach   Summer 2016
  GEAR poster presentation, North Carolina State University

RESEARCH INTERESTS

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

TECHNICAL STRENGTHS

Languages	Mandarin, English
Softwares & Tools	R, Python, C, Matlab, SQL, LaTeX