

# Tunan WANG

No. 207, 402 West Dayton Street, Madison, WI 53703, USA

[Personal Page](#)/Cell Phone: 734-492-2371/Email: [tunan.wang@wisc.edu](mailto:tunan.wang@wisc.edu)

## EDUCATION BACKGROUND

**Shandong University** 09/2016-06/2020

- Major in Statistics, School of Mathematics
- Bachelor of Science

**University of Michigan** 08/2021-04/2023

- Major in Applied Statistics, College of Literature, Science, and the Arts
- Master of Science

**University of Wisconsin-Madison** 08/2023-

- Major in Computer Science, School of Computer, Data & Information Sciences

## RESEARCH & INTERNSHIP EXPERIENCE

**University of Michigan** 07/2022-

- Doing research with Prof. Albert S. Berahas in the Department of Industrial and Operations Engineering.
- Content: Developing an adaptive method on distributed optimization settings. To be specific, we are developing a kind of stochastic variant (w.r.t. constraints) of SQP (sequential quadratic programming) which can solve distributed problems without manually setting any hyperparameters.

**Tianjin University** 09/2020-03/2021

- Part-time RA in the associate professor Runliang Dou's group
- Content: Research on the topic of operation research and management, take part in the Industrial Big Data Competition on the topic of "prediction of reservoir's flow of hydropower station".

**First Capital Securities Co., Ltd.** 07/15/2019-09/13/2019

- Internship at Company Business Department, Summer Intern
- Content: Prepared the reception meeting, recorded the conversations with customers, made systematic investigation and evaluation reports based on the company's public information, sorted out the indicators of real estate companies according to the rating report of rating company, wrote internal rating report of the company and daily bond price changes report

**Shandong University Undergraduate Science and Technology Innovation Fund Project**

05/2018-05/2019

- Project Topic: Optimization of Kernel Density Estimation of Fund Size and Sharpe Ratio
- Group leader of 4-person research group
- Content: Used traditional N-W Kernel Regression to process the data with an outlier, then added L1, L2 Regularization and regularized Huber loss function to the original Algorithm to make the outcome

with higher robustness and alleviate the overfitting problem. The results show that the curve draw by the Algorithm which used Huber loss function and regularized with L1 regulation has better sparsity and runs faster than the others

#### **China Undergraduate Mathematical Contest in Modeling**

09/13/2018-09/16/2018

- Project Topic: The Mathematical Model of Heat Insulation Clothing based on Finite Element Difference Method
- Provincial First Prize, Group member of 3-person research group
- Content: The thermodynamic process model of heat insulating clothing and single objective nonlinear programming model were established by means of the thermodynamic heat conduction equation, the construction of Crank-Nicolson equation with implicit finite element method, the variable step size algorithm and the dichotomy method, and then explored the heat conduction process in the heat insulation clothing and the design of the heat insulation clothing

#### **China Securities Co., Ltd.**

07/16/2018-08/31/2018

- National large comprehensive securities company approved by the China Securities Regulatory Commission
- Internship at Fixed Income Department, Summer Intern
- Content: Collected data information of bond market and prepared summary report; assisted to complete special reports and in-depth reports on credit debts; prepared meeting reports and bond issuance notice, drafted contracts, etc.

### **ACTIVITIES & HONORS**

- Provincial First Prize in the National College Student Mathematical Modeling Competition 09/2018
- Provincial Third Prize in the Chinese Mathematics Competition 10/2018
- Second Class of Scholarship, Shandong University 2017-2018
- Student Union of Shandong University, Head of Department of Literary & Art 2016-2018
- Excellent Individual of Student Union, Shandong University 2016-2018
- Third Class of Scholarship, Shandong University 2016-2017
- Advanced Individual of Social Work, Shandong University 2017

### **COMPUTER SKILLS**

R, Matlab, Python