# YUKUN DONG

96 Jinzhai Road, Hefei, Anhui, 230026, P.R.China $+86\text{-}18971660160 \diamond \operatorname{dyk}2021@mail.ustc.edu.cn} \diamond GitHub} \diamond Homepage$ 

#### EDUCATION

University of Science and Technology of China

09/2021 - 06/2025 (Expected)

Bachelor of Science at School of Gifted young, Major: Statistics. GPA: 3.83/4.3. Weighted average score: 89.37/100. Ranking: 9/53.

Selected Courses: Real Analysis (92/100), Complex Analysis (90/100), Functional Analysis (91/100), Advanced Programming and Practice (95/100), Linear Algebra I (96/100), Regression Analysis (98/100), Machine Learning (99/100), Nonparametric Statistics (99/100), Multivariate Analysis (96/100), [Grad] Linear Regression Models (91/100), Time Series Analysis (90/100).

#### MANUSCRIPTS

Yukun Dong, Hansheng Jiang, Qiang Sun, "Unraveling When and Why Couriers Wait: Empirical Analysis from Structural Breakpoint Detection", SSRN Working Paper (2024). Available at: https://papers.ssrn.com/sol3/papers.cfm?abstract\_id=5202314. Submitted to Transportation Science - The First INFORMS TSL Data-Driven Research Challenge.

#### EXPERIENCES

Undergraduate Research Program: Generalization of High-Dimensional Linear ModelsUniversity of Science and Technology of China, Department of Statistics.12/2023 - PresentSupervisor: Prof. Wenquan Cui12/2023 - Present

• My research focus on the generalization error of linear models in high-dimensional situations. I've done a number of simulation studies on the topic. The project spanned a year and enabled me to use my spare time to read papers and write code on modern ML topics such as high dimensional statistics, double descent, kernel machines, the statistical viewpoint of deep learning etc. More importantly, this direction (theoretical ML) is the one I am interested in the most, and I am planning to extend this project to my graduation thesis, in order to gain a deeper understanding of the connection between kernels and neural networks. (Slides and docs)

#### Transportation Science & Logistics Data-Driven Research

University of Toronto, Rotman School of Management.

06/2024 - 03/2025

Supervisor: Prof. Hansheng Jiang and Prof. Qiang Sun

• Conducted extensive exploration and analysis of the Meituan dataset with the aim of identifying and solving existing problems. I started from scratch to formulate a research problem and tried multiple research directions.

• Through stratifying the data, I proposed a "regression continuity design" structural breakpoint detection method to identify courier waiting phenomenon in meal delivery platforms. This method not only provides merchant-level uncertainty and sensitivity measures, but also has practical managerial implications, such as enhancing merchant-platform interaction and imporving online sampling process.

• We submitted our paper to the "The First INFORMS TSL Data-Driven Research Challenge" track of Transportation Science. I am proud to be the core contributor to both the idea and the coding implementation of the paper, and I am also very grateful to my mentors for their guidance.

#### SKILLS

Programming	Python, R,
English	TOEFL 103 (Speaking 23), GRE 319+3.5

#### SELECTED PROJECTS

# Ustcflask (Repo(Chinese)) • I led a six-person team to develop a blog website called "ustcflask". • The technology stack we used includes Python, Flask, MySQL, and Bootstrap. NetEase Cloud Music Data Analysis (Project(Chinese) Code) • Used Python web scraping techniques to collect a large amount of comment data from NetEase Cloud

Music and conducted basic data analysis on the collected comments.

• Leveraged a pre-trained model for sentiment analysis and conducted extensive data visualization using R.

## Xinhong Fund Quant Contest (Code)

• The goal of this contest was to predict stock returns based on 300 anonymous features. We reviewed relevant literature, designed the network architecture according to the data, and used models such as LSTM, implementing them with PyTorch.

## AWARDS

• Excellent Student Scholarship - Silver (10%)	2022
• China Undergraduate Mathematical Contest in Modeling - Second Prize in Anhui Province	2022
• Excellent Student Scholarship - Silver (10%)	
• China Undergraduate Mathematical Contest in Modeling - First Prize in Anhui Province	
• National Scholarship (2%)	
• Qiangwei Endeavor Scholarship	
-Granted to students with the greatest improvement throughout the year.	

## EXTRACURRICULAR

• Peer tutoring for the "Electromagnetics" course	2022
• MBZUAI visiting student	07/2024 - 08/2024
• Teaching Assistant in 2024 Fall "Machine Learning" course	2024
$\bullet$ Teaching Assistant in 2025 Spring "Multivariate Analysis" course	2025

06/2022

## 05/2023

07/2023 - 08/2023