Dayu Wu

96 Jinzhai Road, Hefei, Anhui, China, USTC
Mail: wdyknight@mail.ustc.edu.cn Website: dayuwu.github.io

EDUCATION

University of Science and Technology of China
B.Sc. Statistics, 2023(expected)
Awards and Honors
GIEC Scholarship, Chinese Academy of Sciences, Sole recipient, 2020
Outstanding Freshman of the Year, USTC, Top 5% among first-year students, 2019

RESEARCH INTERESTS

Methodologies: Data-driven Analytics; Mechanism Design; Machine Learning; Game Theory.
Applications: Supply Chain Management; Online Platforms and Retailing; Healthcare Management.

WORKING PAPERS

1. Comprehensive Prize vs. Special Track Prizes in Multi-attribute Innovation Contests (with Yangyang Xie and Qinglong Gou).
2. Information Asymmetry in the Entry of Innovation Contest (with Qinglong Gou and Ying-Ju Chen).

RESEARCH EXPERIENCES

Department of ISOM, HKUST, Supervised by Prof. Ying-Ju Chen **Jun.2022 - present**
- Proposed a new perspective that the interaction among contestants, the platform, and the firm, could be viewed as the supply chain of innovative ideas; and studied the crowdsourcing contest as a service provided by the platform, including contest package pricing with an uncertain number of contestants
- Crawled some data and applied a model-free regression to verify the effect of the contest guarantee
- Designed the participation information disclosure, derived Bayesian Nash Equilibrium strategies under different information structures, and discussed the optimum of expected revenue and platform payoff

Department of Management Science, USTC, Supervised by Prof. Qinglong Gou **Oct.2021 - present**
- Introduced the idea of prize dimensions and criterion attributes to the traditional contest model
- Proposed a new formulation of utility and proved its convexity, derived the optimum of homogeneous agents' payoff and effort strategy, and discussed the dominance of different prize mechanisms
- Prepared an abstract and presented the work on POMS China 2022 and ICSS 2022

Department of Biostatistics, UC Davis, Supervised by Prof. Lihong Qi **Jun.2021 - Oct.2021**
- Processed the censored data using R and SAS and constructed tenable nonparametric models
- Analyzed the correlation between immune and obesity biomarkers to identify the causing agents
- Applied LASSO in the Cox Proportional Hazard model to reduce the dimension of biomarker data

CONFERENCE TALKS

Multi-attribute Innovation Contests
- 2022 INFORMS Conference on Service Science
- 2022 POMS International Conference in China

TEACHING EXPERIENCES

Applied Statistical Methods (UG Required, Spring 2022)
Teaching Assistant, Department of Statistics, USTC
Mathematical Analysis I (UG Required, Fall 2022)
Teaching Assistant, Department of Mathematics, USTC

LANGUAGES AND SKILLS

R, Python (Numpy, Pandas, Scikit-Learn, PyTorch), LATEX