Yi Fan

No.1239 Siping Road, Yangpu District, Shanghai, China (200082)
(+86) 153-0525-3808 | 2151177@tongji.edu.cn

EDUCATION

Tongji University *Information Management and Information System* *Sept. 2021 - Present*

- **GPA: 4.87/5.00**; **Ranking: 4/52 (Top 7.7%)**
- **Honor: National Scholarship (1.2%), Shen Rongfang Scholarship (only 6 from the college), Investing and Financing Alumni Scholarship (only 8 from college), Yuantong Education Scholarship (only 5 from college),** Tongji Outstanding Student Scholarship, Tongji Outstanding Student Title(4.0%)
- **Courses:** Optimization Theory and Method (PhD Level), Operation Research, Operations Management, Data Structure, Business Intelligence, Python/C++/Java Programming **(All 5.00)**

RESEARCH EXPERIENCE

Unilateral Information Sharing Through Shareholding in a P2P Market *Research Assistant* *Mar. 2023 - Present*

- To explore how dominant firms under the P2P market can cooperate with competitors by combining the real cases of Uber, Airbnb and other firms in the global market under the sharing economy and constructing game model based on the Hotelling model.
- Find the optimal strategy the dominant firms take to unilaterally share P2P platform information and customer targeting method.

Under the Pressure of Environment Regulation, do Companies Really Improve Their ESG Performance? Evidence from China

First Author *Jan. 2024 - Present*

- Use the fixed effects model find that environmental regulatory intensity (ERI) has a positive U-shaped relationship with corporate ESG scores. Mechanism analysis indicates that in the stage of corporate ESG decline, ERI mainly plays a role by inhibiting corporate greenwashing behavior rather than promoting carbon emission reduction by corporations.
- Heterogeneity test indicates that the positive U-shaped relationship between ERI and corporate ESG scores is more significant in enterprises in state-owned enterprises, and enterprises with low return on assets and high gearing ratio.

Towards Inclusive Green Growth in China: Pathways and Mechanisms of Government Open Data

Co-First Author *Oct. 2023 - Present*

- Use Dual Machine Learning-Causal Forest Model to find that the government open data platform promotes the level of inclusive green growth in the city and rank the impact paths and their specific sub-paths in terms of importance through the SHAP Value.
- Integrated use of Entropy Value Method-Mutation Level Method to construct the inclusive green growth measurement system. Further analysis indicates that the impact are more significant for underdeveloped and less developed cities.

Research on Patient Drug Recommendation Based on Multimodal Learning

Research Assistant *Mar. 2023 - Mar. 2024*

- Take heart disease as an example and use Decision Tree, K-nearest Neighbors and other algorithms to predict whether the patient is sick based on the structured data in the electronic medical record.
- Adopt N-gram deep learning model, process the text data using LightGBM and judge the utility of the drug by constructing a neural network. Finally recommend the drug in combination with the patient's medical history.

PROJECT EXPERIENCE

Low-Altitude Logistics Planning *Student Researcher* *Mar. 2024 – May. 2024*

- Design the new drone mode for express parcel logistics, urban flash delivery, blood and first aid material distribution.
- Design low-altitude distribution sites for Gansu Province to expand the transportation throughput to alleviate the pressure of inter-city ground transportation, considering the constraints of the narrow topography and special landscape of Gansu Province.
- Plan drone network for Changsha to alleviate the pressure on the existing postal mode. Focus on the Orange Isle area and design drone food delivery service to improve tourists' travel experience.

Agent-based Modeling and Simulation System for Library Seat Selection

Leader *Jun. 2023 – Aug. 2023*

- Collect data on the school library environment and readers through onsite investigation and questionnaire surveys and use Anylogic software to construct a virtual library environment and create agents representing readers and seats.
- Apply K-means clustering to classify reader agent types and fuzzy analytics hierarchy process (FAHP) to analyze demographic characteristics and behavioral decision-making patterns. Simulate the decision-making process for seat selection based on reader attributes and environmental preferences, and simulated library environment changes by generating random events.
- Optimize and validate model inputs and outputs, adjusting reader attributes and seat booking preference parameters for hypothesis tests and model enhancement, increasing grey correlation degree to 0.87.

COMMUNITY ACTIVITY

ZhiXing China: Shanghai Discovery *China-U.S. Youth Speaker* *Jan. 2024*

- On behalf of Chinese students, deliver a speech on the topic of "Artificial Intelligence and Modern Life" in front of the Minister and Vice Minister of Education of China, U.S. Consul General in Shanghai and Vice Mayor of Shanghai.

Tongji Football Association *President* *Jun. 2023 – Present*

- Captain of the soccer team of the School of Economics and Management in Tongji and National Level II Referee in China.
- Win the champion of Tongji University Championship Cup and the third place in FA Cup in 2022-2023 and the third place of Tongji University Football League and the champion of FA Cup in 2023-2024.

SKILLS & HOBBIES

- **Computer Skills:** Programming (Python, C/C++/C#, Java), Data Analysis (Stata, SQL), Simulation Modeling (Anylogic, Arena)
- **Specialties & Hobbies:** Football, Guitar, Go (5d), Table Tennis, Piano (amateur Level 10), Reading and Writing