# YANXUAN WU

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#### **EDUCATION**

## Shanghai Jiao Tong University (SJTU)

Shanghai/China

B.S. in Electrical Engineering (major) and Finance (minor)

Sep 2019 – Jun 2023 (expected)

- Grade: 87/100 (top 15%) Comprehensive Evaluation: 93/100, (top 2%)
- Course: Linear Algebra, Calculus (I&II), Probability and Statistics, Econometrics, Intermediate Microeconomics, Management Science (In Progress), Operation Research (Graduate Level, In Progress), Experimental Economics (In Progress)

#### **University College London (UCL)**

London/United Kingdoms

Jan 2022 - Jun 2022

Exchange in Arts and Science

Course: Quantitative Methods and Mathematical Thinking, Algorithms: Logic and Structures, Machine Reasoning and Expert Systems

#### RESEARCH INTERESTS

Grade: First class

I apply game theory and empirical methods (econometrics, experiment) to research interesting business problems with behavioral factors incorporated. I am looking forward to exploring diverse subfields such as behavioral operation management (human-algorithm interaction, risk preference, ...), social operation management (corporate social responsibility), supply chain management, applied blockchain and so on.

### SELECTED RESEARCH

#### Joint Investment/Venture (Game Theory)

Jul 2022 - Present

"Vertical Joint Investment under Capacity Limitation and Demand Uncertainty" (Paper in preparation)

We study the joint investment between a supplier (S) and one manufacture (M1) of the two (M1, M2), who sell to separate markets with uniform demand. Besides share of cost and revenue, there is "preferential strategy", which means S would give M1 either order priority (order satisfied first) or price discount (discount market price) or both. We analyze the optimal joint investment strategy, which mainly concerns the share of cost and revenue and the preferential strategy. The optimal strategy can be characterized by market settings (cost, price, demand).

#### **Capacity Expansion (Game Theory, Behavioral)**

Advisor: Zhihong Chen (SJTU)

Advisor: Yaozhong Wu (NUS)

 $Apr\ 2022-Present$ 

"Adaptive Risk Preference and Strategy in Capacity Expansion under Price and Demand Uncertainty"

- Set out six price-demand scenarios with probabilities assigned and six available capacity expansion strategies.
- Built a suggestion system which outputs several indexes such as the expected profit and standard deviation of a specific capacity strategy.
- Plan to conduct an experiment where managers choose strategy based on our suggestions and learn from the competition results.
- Plan to research whether and how the risk preference of a manger adaptively changes and analyze the possible winning strategy.

#### **Corporate Social Responsibility (Empirical)**

Advisor: Xiaoping Zhao, Zucheng Zhou (SJTU)

Sep 2021 - Sep 2022

"Relationship between Manager's Personal Background and the Evaluation of External Environment for CSR Implementation"

- Applied two multiple linear regressions, with and without control variables, to research the net relationship between personal background such
  as age and gender and the evaluation of external environment, based on the data collected from MBA students across China.
- Analyzed the underlying mechanisms from the perspective of work experience, tolerance, forgiveness and anchor bias.
- Gave implications for companies to recruit from different backgrounds to form the CSR department with staff's attitudes towards the external
  environment balanced as well as for scholars to reduce bias in a right way when sampling people's view about the external environment.

#### **Image Process and Classification (Machine Learning)**

Advisor: Colin Tan (NUS)

 $Jun\ 2022 - Aug\ 2022$ 

"Drowsy Driving Detection under Different Circumstances with Convolutional Neural Networks (CNN)"

- Developed the algorithm based on CNN to detect drowsiness with nearly 95% accuracy under different circumstances such as dark or bright.
- Built the backend classification server that performed the algorithm to handle the data and communicated data between detectors and actuators.
- Transferred data over Message Queueing Telemetry Transport (MQTT), RESTful APIs and stored in SQL databases.

# SEMINARS & TALKS

HK Theory seminars, CUHK-HKU-HKUST	Oct 2022 – Present
Virtual East Asia Experimental and Behavioral Economics Seminar Series	Oct 2022 - Present
Young Scholar Seminar Series, Rotman School of Management, University of Toronto	Sep 2022 – Present
Management Talks Series, Antai College of Economics and Management, Shanghai Jiao Tong University	Sep 2022 – Present
Econ.talks.2022, Antai College of Economics and Management, Shanghai Jiao Tong University	Jul 2022 – Present

#### HONORS & AWARDS

•	Honor Student in Shanghai Jiao Tong University (University, 2%)	2020, 2021
•	Ren Yuan Electric Scholarship (University, 3%)	2020, 2021
•	The Second Prize in Fanhai International Collidoscope Challenge (International, 1%)	2021
•	Advanced Social Practice Individual in Shanghai Jiao Tong University (University, 1%)	2020
•	Honorable Mention in the Mathematical Contest in Modeling (International, 10%)	2020

#### PROFESSIONAL EXPERIENCE

Guo Sheng Securities Shanghai/China

Analyst intern, Electrical Engineering and New Energy Department

Jul 2021 - Aug 2021

- Independently researched the competition in each market across the supply chain of electrical vehicle (EV) industry.
- Built a database to track and applied linear regression to predict the production and sales of EVs around the world.
- Wrote insightful comments on the latest issues to inform our company customers, formed opinions about the industry or some typical
  companies to inform the public and coded meetings and interviews, etc., with a total of more than 100,000 words.

Taixing Government Jiangsu/China

Leader of Intern group, Organization Department

Jul 2020 - Aug 2020

- Led the intern group comprising over 100 students from over 20 local government branches.
- Analyzed the performance of local branches of communist party and give suggestions on how to improve their work.
- Organized summer camps for children whose parents work in other cities.

### EXTRA-CURRICULAR STUDY

### Fanhai International School of Finance, Fudan University

Shanghai/China

Global Leadership Program in Financial Industry

Apr 2021 - Sep 2021

- Studied macroeconomic and understood the trends of capital market
- Understood the enlightenment and application of the frontier theory of economy
- Learned wealth management strategies and cultivated financial thinking

#### Institut National des Sciences Appliquées de Lyon

Lyon/France Mar 2021

Spring School, Short Circular Design Track

- Learned about circular economy and use of digital tools to make a virtual mock-up
- Carried out a user-oriented research based on European market and found environmental issues can be solved with digital tools
- Designed an APP to offer convenient online ordering service and promote recycling after meals for Lyon campus cafeteria

## **ACTIVITIES & LEADERSHIP**

•	Team Leader in FTxBocconi Challenge, Financial Times & Bocconi University	2022
•	Participant in Youth Club, United Nations Development Programme	2021
•	Member of Champion Team in Warwick-SJTU Global Challenge	2021
•	Distinguished Deputy Director at Human Resource Center, Hult Prize China	2021
•	Student Representative at Undergraduate Committee, SJTU	2020

## ADDITIONAL INFORMATION

- Languages: English (IELTS:7.5), Mandarin Chinese (Native)
- Technical Skills: Python, C++, Matlab, Stata
- Interests: Travelling, Thinking, Reading, Philosophy, Basketball, Tennis