Name: 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 –

- Grade: 86.7 (top 15%)   Comprehensive Evaluation: 92.9, (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), Decision Theory (In Progress)

University College London (UCL)   **London/United kingdoms**
  Exchange in Arts and Science   Jan 2022 – Jun 2022

- Grade: First class
- Course: Quantitative Methods and Mathematical Thinking, Algorithms: Logic and Structures, Machine Reasoning and Expert Systems

Research

Joint Investment/Venture (Game Theory)   *Advisor: Yaozhong Wu (NUS)*   Jul 2022 –
"Contract Design for Vertical Joint Investment under Capacity Limitation and Demand Uncertainty"(Paper)

    In an emerging market (i.e., electrical vehicle), the demand may grow fast though with uncertainty and capacity may be limited, under which circumstance manufactures may stretch operation to materials through joint investment with suppliers. Besides cost and revenue sharing, the partner manufacture is always given priorities: priority ordering (order can be satisfied in the first place) and price discount (wholesale price should be lower than market price). We apply game theory to research the contract under different market settings (price, cost, demand) and try to propose a fair and profitable contract under demand uncertainty.

Capacity Expansion (Game Theory, Behavior)   *Advisor: Zhihong Chen (SJTU)*   Apr 2022 –
"Capacity Expansion Strategy in a Growing Oligopoly with Financial Constraints Based on Scenario Analysis"

- Modeled the capacity decision under financial constraints based on different price-demand scenarios.
- Assigned probabilities to scenarios to describe the uncertainty and modified the probability to capture the uncertainty of uncertainty, simulating that in reality, companies may not be informed of future price-demand and can be misled by competitors, securities and customers.
- Designing a game for managers to play with different market settings and strategies.
- Will incorporate behavioral factors inspired by managers' performance to research the mechanism behind winning strategy.

Corporate Social Responsibility (Empirical)   *Advisor: Zucheng Zhou (SJTU)*   Sep 2021 – Sep 2022
"Impacts of Personal Background on Managers' View about External Environment for CSR Implementation"

- Applied regression, clustering and hypothesis test to analyze the data collected from MBA students across China and found that managers who work longer and more senior are less optimistic as well as males are generally less than females.
- Analyzed mechanisms behind the results from multiple disciplines such as psychology and sociology.
- Gave implications for companies to form a more efficient CSR group as well as for scholars to consider the inevitable bias in manager's view about enterprise external environment in a right way.

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 an algorithm based on Convolutional Neural Networks (CNN) to detect the drowsiness of driver with nearly 95% accuracy under several circumstances (dark or bright, traffic jammed or not, head up or down).
- Collected data with detectors, transferred over Message Queueing Telemetry Transport (MQTT), RESTful APIs and stored in SQL databases.
- Built a global web server, on which we applied our algorithm and transfer the results back to instruct actuators to remind the driver.

Research Seminars

Young Scholar Seminar Series, Rotman School of Management, University of Toronto	Sep 2022 –
Econ.talks.2022, Antai College of Economics and Management, Shanghai Jiao Tong University	Jul 2022 –

Honors & Awards

- Honored Student in Shanghai Jiao Tong University (Univesity, 2%)	2020, 2021
- Ren Yuan Electric Scholarship (University, 3%)	2020, 2021
- The Second Prize in Fanhai International Collidoscope Challenge (International, 1%)	2021
- Excellent League Member of Shanghai Jiao Tong university (Univesity, 3%)	2020
- 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 supply chain of electrical vehicle (EV), analyzed competition patterns and wrote 15,000 words in-depth reports.
- Built a database using Excel to track the production and sales of EVs around the world.
- Efficiently wrote insightful comments on the latest issues to update our 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 and assisted them to conduct work smoothly and efficiently.
- Analyzed the performance of local branches of communist party and proposed a revolutionary plan to improve their work.
- Organized summer camps for primary school students whose parents do not work in their home city.

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**
Spring School, Short Circular Design Track   Mar 2021
- Learned circular economy concepts and 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, Basketball, Tennis, Thinking, Reading