Shujie XU

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Evanston, IL - 60201, United States

EDUCATION

- **Northwestern University & Chinese University of Hong Kong** *Aug. 2024 - Present*
  Dual M.S. in Social & Economic Policy and Applied Economics (Expected Dec. 2025) Evanston, USA & Hong Kong SAR
  ○ **GPA:** Northwestern 3.83/4.00 | CUHK 3.83/4.00
  ○ **Selected Coursework:** Macroeconomic Analysis & Applications (A, Excellent Performance Award), Microeconomic Analysis & Applications (A), Econometric Analysis & Applications (A), Machine Learning for Economists (A), Causal Methods for Policy Evaluation, Mathematics for Economic Analysis

- **Cambridge University** *Jul. 2023 - Aug. 2023*
  Summer Academic Program - Quantitative Finance & Investment Track Cambridge, United Kingdom
  ○ **Grade: A+** (93.6/100, Top 5%); **Honors:** Best Project Award | Supervisor: Prof. Andrei Kirilenko

- **Southwestern Univerisity of Finance and Economics** *Sep. 2020 - Jul. 2024*
  Bachelor of Economics in Finance (Major), Economics (Minor) Chengdu, China
  ○ **GPA:** 3.60/4.00; **Average Score:** 85.00/100
  ○ **Selected Coursework:** Advanced Microeconomics, Intermediate Macroeconomics, Econometrics, Advanced Algebra, Programming and Python
  ○ **Thesis:** *Political Attention, Partisan Alignment, and Corporate Performance* | *Supervised by Prof. Yue TANG*

RESEARCH INTERESTS

- My research studies how information frictions and institutional contexts shape firm behavior and market outcomes. I use computational methods and textual data to examine strategic decision-making in corporate and urban settings.
- **Primary Fields:** Applied Microeconomics, Corporate Finance, Urban Economics
- **Research Areas:** Information economics; corporate political engagement; housing markets
- **Methods:** Natural language processing, causal inference, computational economics

RESEARCH EXPERIENCES

- **Research Assistant to Prof. Franklin Qian** *Mar. 2025 - Present*
  University of North Carolina, Kenan-Flagler Business School Remote
  Project: How do listing price formats affect housing market bargaining outcomes? (Urban Econ., Real Estate Finance)
  Related Working Paper: "The Numbers Game: Effects of Listing Pricing Formats in Housing Bargaining"
  by Haaris Mateen, Franklin Qian, Ye Zhang, and Tianxiang Zheng | Preparing for conference submission
  My Contribution: Designed seller sorting measure; led demographic and price-range heterogeneity analysis
  Research Contributions:
  ○ **Designed text-based measure of seller impatience to empirically test paper's theoretical sorting mechanism.** Proposed and implemented measurement strategy using Word2Vec embeddings on 80M+ MLS listing remarks to identify sellers likely to select round vs. precise pricing. Developed domain-specific seed words and preprocessing pipeline; validated measure against human-coded benchmark achieving 96% precision at 6% recall. Measure enables direct test of predicted seller self-selection patterns.
  ○ **Extended probabilistic matching methods to merge HMDA mortgage data with CoreLogic transaction records.** Developed procedures handling Census tract boundary changes across 2000, 2010, 2020 vintages; achieved 65.6% match rate on 100M+ observations while maintaining covariate balance. Documented methodology into comprehensive replication materials now adopted by other research teams at UNC. Linked dataset enables heterogeneity analysis by borrower demographics and transaction characteristics.
  ○ **Designed and executed heterogeneity analysis examining treatment effects across demographic groups and price ranges.** Specified regression framework testing differential price format effects by borrower race, income quartiles, and property value segments. Implemented estimations in Stata with computationally intensive specifications in Julia; conducted robustness checks varying control sets, sample restrictions, and clustering levels.

- **Research Assistant to Prof. Letian Zhang** *Aug. 2024 - Mar. 2025*
  Harvard Business School (now Northwestern University, Kellogg School of Management) Remote
  Project: Corporate behavior and human capital investment under varying political contexts
  Building foundational datasets to examine how political institutions and leader characteristics shape firm strategy
  Research Contributions:

- **Constructed longitudinal database of 600+ political leaders across 30+ countries with systematic coding of leader characteristics.** Following established classification framework, coded ideological orientation (left/right positioning), governance style (populist/technocratic), and institutional constraints (executive power, term limits, coalition structure). Documented leadership transitions and designed database schema linking leader profiles with temporal political context variables, supporting multiple projects examining political-economy mechanisms.
- **Built text corpus of 9,000+ political speeches spanning diverse contexts and formats for planned text analysis.** Collected speeches from government archives, legislative records, and media outlets including policy addresses, press conferences, and international forums. Developed automated transcription pipeline for audio/video materials with quality controls for variable audio quality and multilingual content. Structured metadata organized in panel format to enable future supervised learning and topic modeling applications.

• Research Assistant to Prof. Yue Tang
Feb. 2023 - Jan. 2024

Southwestern University of Finance and Economics
Chengdu, China

Project: How does firm position in supply chain networks affect exposure to external shocks?
Working Paper: "Enterprise Supply Chain Risk and Network Status: Evidence from Annual Report Text Mining"
Role: Co-authored full initial draft; independently designed and executed data construction, text analysis, and econometric estimation

Research Contributions:

- **Designed text mining pipeline extracting supply chain risk measures from 10,000+ Chinese corporate annual reports (2012-2021).** Developed Chinese-language keyword dictionaries and dependency parsing rules to identify risk-related disclosures; constructed firm-year level risk intensity measures. Validated measure against external shocks including 2020 U.S.-China trade disruptions. Text processing implemented using jieba and gensim; pipeline design enables extension to other disclosure contexts.
- **Constructed supply chain network from disclosed supplier-customer relationships and computed multiple centrality measures.** Built directed network graph from transaction data covering all A-share listed firms; calculated PageRank, eigenvector centrality, and closeness centrality. Network measures test hypothesis that central firms face lower risk exposure through diversification and enhanced bargaining power, controlling for firm size and industry composition.
- **Conducted full empirical analysis using fixed effects panel regressions with firm and industry-year fixed effects.** Implemented rolling window regressions examining temporal variation in centrality-risk relationship. Findings indicate central firms exhibit 16% lower risk exposure with magnified effects during aggregate uncertainty periods. Presented results at departmental research seminar; incorporated feedback into manuscript revisions.

RESEARCH PROJECTS

• Political Attention, Partisan Alignment, and Corporate Performance
Nov. 2023 - May 2024

Undergraduate Thesis | Advisor: Prof. Yue Tang
Chengdu

Research Question: How do corporate political characteristics measured through earnings call discourse affect firm performance?

Research Contributions:

- **Developed "policy-taker" framework where firms respond to political climate through disclosure rather than direct connections.** Theory predicts Political Attention enhances performance via lobbying mediation and reputation mechanisms, moderated by Partisan Alignment. Addresses limitations of CEO-level political proxies with agency problems and selection bias.
- **Constructed text-based measures using semi-supervised ML on 220M+ earnings calls and 3K+ presidential documents.** Built Political Terms dictionary; extracted Presidential Political Terms using TF-IDF and categorized into policy themes; applied Word2Vec to identify synonyms addressing political-corporate vocabulary mismatch.
- **Validated theory through fixed effects regressions: 1% increase in Political Attention yields 2.0pp ROA improvement.** Findings show 15.8% of effect mediated via lobbying expenditure; Partisan Alignment adds 2.8pp for aligned firms. Policy-relevant industries (healthcare, energy, finance) show 0.4pp stronger sensitivity. Results robust to alternative performance measures (ROE: 4.2pp; Sales: 3.3pp).

PROFESSIONAL EXPERIENCE

• Risk Management Analyst Intern
Oct. 2023 - Jan. 2024

Financial risk assessment and portfolio analysis
Sinolink Securities

• Industrial Research Assistant
Jan. 2023 - May 2023

Industry analysis and company research
China Securities

• Field Interviewer & Research Assistant
May 2022 - Aug. 2022

Household survey data collection and processing
Survey and Research Center for China Household Finance

SKILLS

- **Programming Languages:** Python, Stata, MATLAB, Julia, R, SQL, Shell/Bash
- **Python Libraries:** pandas, NumPy, scikit-learn, gensim, NLTK
- **Tools & Environments:** Git/GitHub, LaTeX, VS Code, High-Performance Computing, Linux/Unix
- **Languages:** English (fluent), Mandarin (native), Spanish (intermediate)

REFERENCES

1. **Reference Person 1**
   Job Title, Department
   Organization/Institution Name
   Email: email1@example.com
   Phone: +X-XXX-XXX-XXXX
   Relationship: [e.g., Thesis Advisor, Manager, etc.]

2. **Reference Person 2**
   Job Title, Department
   Organization/Institution Name
   Email: email2@example.com
   Phone: +X-XXX-XXX-XXXX
   Relationship: [e.g., Project Supervisor, Colleague, etc.]

3. **Reference Person 3**
   Job Title, Department
   Organization/Institution Name
   Email: email3@example.com
   Phone: +X-XXX-XXX-XXXX
   Relationship: [e.g., Mentor, Collaborator, etc.]