JIFAN WANG

jw2004@georgetown.edu | (202)-375-8590 | Linkedin | Github

EDUCATION

- **Georgetown University**, Ph.D. candidate, Econometrics and Quantitative Economics, GPA: 3.80/4   **2021 - Dec. 2025(Anticipated)**
- **Central University of Finance and Economics**, M.S., Economics, GPA: 3.71/4   **2018 - 2021**
- **Shandong University**, B.S., Finance, GPA: 3.73/4   **2014 - 2018**

Awards: Merit-based Scholarship and Fellowship(Georgetown); China National Scholarship(Top 0.2%), the Ministry of Education of China

WORKING EXPERIENCE

- **Amazon** | *Economist Intern, Causal Inference Track*   *May 2025–Aug 2025* **Seattle, WA**
  - Developed and validated a synthetic control with surrogate modeling, extending the Bayesian Directional synthetic control framework to evaluate the long-term causal impact of seller fee policy changes.
  - Designed and tested surrogate selection methods (F-test, Elastic Net, SHAP, orthogonalization) to address multicollinearity and improve inference precision, resulting in narrower confidence intervals (50–60% smaller) compared to baseline results.
  - Built and deployed a placebo testing framework (time-based and unit-based) to rigorously assess the robustness of causal impact estimates across horizons up to 360 days.
- **Sparken Capital** | *Quant Analyst Intern*   *June. 2024- Aug. 2024* **New York, NY**
  - Enhanced pricing model accuracy by analyzing corporate debt text data from Bloomberg, conducting sentiment analysis on lender comments, and integrating findings with financial metrics, resulting in a 5% improvement in default probability predictions.
  - Automated the extraction and analysis of annual reports and financial news by integrating FinRobot, FinChat, and GNews APIs, enabling real-time generation of dynamic charts, thereby streamlining workflows and enhancing data analysis efficiency by 20%.
  - Extracted and processed large volumes of structured and unstructured financial data using Python SQL and NLP techniques such as text cleaning and sentiment analysis, ensuring high-quality datasets for predictive modeling and analysis.
- **World Bank** | *Short-term Consultant*   *Feb. 2024- June 2024* **Washington, DC**
  - Analyzed and decomposed efficiency and productivity across firms and countries in East Asia by assessing multiple inputs and outputs, delivering actionable insights to enhance performance.
  - Estimated causal impact of infrastructure projects in Vietnam and the Philippines on regional productivity and related industries by applying Difference-in-Differences (DID) and synthetic control methods, thereby providing data-driven policy recommendations.
  - Benchmarked productivity and technology trends across East Asia and the Pacific, using ARIMA and VAR models to forecast economic outcomes based on firm-level productivity changes, enabling policymakers to understand the broader economic implications.
- **Lab for Globalization and Shared Prosperity** | *Research Analyst*   *September 2023- Feb. 2024* **Washington, DC**
  - Applied semi-supervised learning techniques to manually label features in a subset of policy documents, scaling annotations across the entire dataset, and evaluated bipartisan support for education spending using natural language processing methods.
  - Deployed Python-based text analysis scripts on cloud servers to automate the examination of U.S. trade and state-level education policy documents, facilitating the identification of the China trade shock's impact on local U.S. communities.
  - Transitioned the lab's data storage from Dropbox to cloud-based solutions, enhancing data transfer speeds and reducing processing time for key tasks from six hours to two.

PUBLICATION, WORKING PAPER & CONFERENCE

- "Shadow Banking, Macroprudential Policy, and Bank Stability: Evidence from China's Wealth Management Product Market" with Alice Y. Ouyang, Journal of Asian Economics, 101424, Volume 78, 2022
- "Economic Policy Uncertainty and the Firm–Bank Nexus: Investment, Liquidity, and Bank Risk-Taking Under Uncertainty" (Dissertation)
  - Built novel text-based state- and firm-level EPU indices and applied IV-GMM, local projection, event study, machine learning, and DSGE methods to show how uncertainty shocks reshape firm investment and cash holdings as well as bank deposit, lending and liquidity.
- "Persistence in bank risk-taking" with Dan Cao and Robert Kurtzman(Working)
- Western Economic Association International Virtual International Conference, March 17-19, 2021

RESEARCH PROJECT

- **Firm Growth and Firm Dynamics Research Project of Prof. Mukuyama and Prof.Cao**   **2022-2024**
- **Kaggle Competition Silver Medal: Home Credit - Credit Risk Model Stability**   **2024**
  a.Trained LGBM and CatBoost models with five-fold cross-validation and hyperparameter tuning. **b.**Conducted feature engineering and selection, identifying key variables that influenced credit risk predictions. **c.**Used model ensembling with VotingModel for predictions.
- **International Comparison of Municipal Bond Regulations Project, the Ministry of Finance(China)**   **2020**
- **The Capital Account Openness under Renminbi Exchange Rate Regime Reform Project, National Social Science Foundation**   **2019**
- **China Economic Reform Implementation Project, World Bank and the Ministry of Finance(China)**   **2018**

SKILLS

- **Tools: Causal Inference:** PSM-DID, Synthetic Control, Regression Discontinuity, Double Machine Learning, etc; **Online Experiment:** A/B test, etc; **Time Series Analysis:** ARIMA, VAR, VECM, Kalman Filter, Bayesian Time Series, etc; **Regression:** Logistic, Two Way Fixed Effect, IV-GMM, IV 2SLS, etc; **Machine Learning:** NLP/BERT/LLM, Random Forest, XGboost, LightGBM, Catboost, etc;
- **Programming:** Python, MySQL, R, Stata, MATLAB, ArcGIS, Tableau, SAS, PySpark, PowerBI, LaTeX; **AWS tools**: EC2, Sagemaker, S3, etc
- **Teaching:** Empirical Macro(Time series); Game Theory; International Finance;
- **Certificates:** CFA Level 3; NLP specification(Coursera)