

# Peiying (Aria) Hu in

E-mail: phu46@wisc.edu Phone: +1 (608)-556-2886

Homepage: <a href="https://aria-hu106.github.io/">https://aria-hu106.github.io/</a>

#### **EDUCATION**

# **University of Wisconsin-Madison**

09/2023-05/2025

- Master of Science in Economics (Quantitative Economics and Econometrics) | GPA:3.8/4.0
- Core Curriculum: Econometrics, Microeconomics, Macroeconomics, Machine Learning, Game Theory, Health Economics

# The Chinese University of Hong Kong, Shenzhen

09/2019-07/2023

- B.B.A. in Applied Economics | GPA:3.6/4.0 | Dean's List
- Core Curriculum: Political Economics, Optimization, Computer Architecture, Supply Chain Management

#### SKILLS SUMMARY

Programming: Stata, Eviews, Python, R, LaTeX, Tableau, Microsoft Word, Excel, PowerPoint

Language: Fluent in English and Mandarin (spoken and written)

### **WORK EXPERIENCE**

# Research Assistant (Advisor: Prof. Deneckere), University of Wisconsin-Madison

03/2024-10/2024

- Conducted comprehensive analysis of the oil tanker shipping industry (1970–2023), focusing on discrepancies between existing theoretical models and observed market behavior
- Reviewed literature, discussed their strength and weakness; Extracted theoretical models describing how vertical markets reach equilibrium; Summarized patterns in shipowners, charterers, and oil companies across global shipping routes
- Collected and standardized historical data from UNCTAD and Baltic Exchange; Updated and maintained well-organized datasets to support ongoing research objectives

# Research Intern, Shenzhen Institute of Financial Stability and Development

02/2023-08/2023

- Conducted financial market research on FOF, government found, pension finance, IPOMS, and digital service; Authorized 12 research reports (200K+ words) and presented in government initiatives; Directly affected policy formulization
- Applied crawler to collect operation data for 60+ companies, established forecasting models and visualized results; Crafted development planning for enterprises; Updated models regularly, significantly enhanced the accuracy of policy assessment
- Participated in 5 SOE financial research communication meetings and wrote meeting reports; Assisted in the preparation and onsite exhibition of the 11th International Financial Trade Fair

# Intern of Stock Issuance Dept., Zhejiang Equity Exchange Center

06/2022-11/2022

- Conducted comprehensive market research, fundamental analysis, and backtesting using historical data to simulate investment strategies; Tuned parameters for improved results across different sectors
- Assisted in implementing weekly news tracking system to monitor performance and industry developments for 12+ companies, streamlining data collection and analysis to inform decision-making
- Compiled and reviewed of 30+ stock issuance schemes, researched growth stock-picking strategies and delta/volatility hedging techniques; Gained insights into market dynamics and equity financing processes

# Intern of Transaction Management Dept., Zhejiang Intellectual Property Center

02/2022-06/2022

- Assisted in developing financial models to estimate the market value of IP assets; Analyzed historical transaction data and market trends to enhance model accuracy
- Updated dashboards to track trading center efficiency and liquidity, including trade volume and turnover rates; Made information disclosure and updates on the official website; Managed the operation of center's official account

## **RESEARCH & PROJECTS**

# Individual Project, Customer Segmentation-A Classification Problem with Logistic Regression, Support Vector Machine (SVM) and K-Means Clustering 10/2024-12/2024

- Developed a data processing pipeline supporting outlier detection, normalization, encoding, and PCA to improve data quality; Achieved 10% increase in model accuracy compared to using raw data for training
- Implemented logistic regression, SVM, and K-Means algorithms to construct consumer profile; Optimized hyperparameters based on cross-validation results; Achieved over 85% accuracy in predicting consumer purchase intent
- Performed comparative analysis of model outcomes, delivered actionable insights into customer purchase intent and segmentation, supporting data-driven marketing strategies and resource optimization

# Individual Research Paper, The Effects of Having a Second Child on Chinese Women's Wages

09/2024-12/2024

• Analyzed the impact of having a second child on Chinese women's wages using Difference-in-Differences (DID) and Propensity Score Matching (PSM), revealed significant heterogeneity and persistence in wage penalties across different income levels, proposed policy recommendations to address the motherhood wage penalty