Yue Yu
yueyu.info

Email: yueyu@tamu.edu
Mobile: +1 (929) 672-7269

Education

Texas A&M University — Texas, U.S.
Ph.D. in Marketing, Arch H. Aplin III '80 Department of Marketing, Mays Business School — *Aug 2026 – Present*

Columbia University — New York, U.S.
MPA in Environmental Science and Policy, SIPA; GPA: 3.67/4.0 — *May 2023 – Jun 2024*

- Selected Courses (Economics-related): Environmental Economics, Development Economics, Econometrics, International Economics, Applied Statistics

The Chinese University of Hong Kong — Hong Kong SAR
MSc in Environmental Informatics, ISEIS; GPA: 3.82/4.0; Dean's List Honors — *Sep 2022 – Oct 2023*

- Selected Courses (Computational-related): Machine Learning, Remote Sensing Technology, Spatial Analytics, GIS

Beijing Forestry University (Project-211) — Beijing, China
BSc in Forestry, Liang Xi Honors Program; GPA: 3.91/4.0; Summa Cum Laude — *Sep 2017 – Jun 2021*

- Selected Courses (Mathematics-related): Advanced Calculus, Statistics, Quantitative Forestry, Biostatistics

Publications

High Average and Linear Scaling of Ecological Footprint in Cities
Nature Communications, 2026

- **Authors**: Boqian Xu, Kaili Zhang, Liqing Li, **Yue Yu**, Kaitlin Linden, Benjamin P. Goldstein, Bahar Dadashova, Galen Newman, Xinyue Ye, David Lin, Wenzhe Jiao

Selected Works in Progress

Consumer Prepayment as Merchant Financing — Data analysis stage

- **With**: Yixuan Liu, Hua Zhang and Eric Zou
- **Summary**: This project analyzes nearly 8 million prepayment transactions across approximately 64,000 dining establishments using linked store-level and consumer-level data from a major digital payment platform in China. By examining heterogeneity in merchants' reliance on prepaid balances and consumers' redemption behavior, the study investigates how firm characteristics, expected future demand, and customer loyalty shape consumer prepayment decisions and their role as a source of merchant financing.

Entrepreneur Migration and Local Economic Dynamics — Data analysis stage

- **With**: Wei Xiang, Yixuan Liu, Hua Zhang and Eric Zou
- **Summary**: This project constructs a 2017–2025 nationwide panel of 7.4 million stores and 5.6 million store owners from a major digital payment platform in China, enabling the first large-scale documentation of entrepreneur migration patterns using owner–store linked geolocated records. By relating cross-provincial mobility to local economic shocks and policy changes, the study investigates how mobile entrepreneurs reshape regional business formation, competition, and spatial economic inequality.

Research Assistant Experience

Pay Now, Buy Never: The Economics of Consumer Prepayment Schemes
NBER Working Paper #34918

China Europe International Business School | Research Assistant to Prof. Yixuan Liu — *Sep 2024 – Mar 2026*

- **Large-Scale Data Processing**: Processed billions of transaction-level records using SQL; integrated prepayment, purchase, and merchant data to construct consumer–merchant panel datasets covering over 4.6 million consumers.
- **Event-Study Analysis**: Conducted staggered difference-in-differences and event-study analyses to estimate changes in consumer spending following prepayment adoption, using consumer–merchant and week fixed effects.

Local Knowledge or Misallocation: Efficiency Costs of Discretion in Regulatory Enforcement
Work in Progress

World Bank Group | Research Assistant to Dr. Ruozi Song *May 2024 – May 2026*

- **Environmental Panel Construction**: Processed and cleaned 10 years of high-frequency (4-hourly) water-quality data from over 2,000 monitoring stations across China, constructing a geospatial panel of water pollution indicators.
- **Hydrological IV Construction & GIS**: Integrated precipitation, runoff, digital elevation models, and river networks using ArcGIS Pro to construct hydrological instrumental variables for analyzing environmental regulatory enforcement and pollution outcomes.

Healing Nature at Scale and Return: Lessons from China's Ecological Restoration
Reject and Resubmit, *Science*

University of Michigan | Research Assistant to Prof. Eric Zou *Oct 2023 – Sep 2024*

- **Remote Sensing Data Processing**: Processed MODIS satellite imagery using Google Earth Engine, applying image preprocessing, masking, and zonal statistics to construct high-resolution ecological restoration indicators.
- **Geospatial & Spatial Econometric Analysis**: Integrated historical wind patterns and river networks using GIS to map downstream and downwind exposure; implemented spatial regression analyses to examine environmental policy spillovers.

Teaching Experience

Teaching Assistant, SUSC5050 GIS for Sustainable Science, Columbia University — Spring 2024

Teaching Assistant, SUMA5205 GIS for Sustainability Management, Columbia University — Fall 2023

Grants and Awards

Texas A&M University Graduate Fellowship, Texas A&M University — 2026 – Present

Climate School Student Travel Grant, Columbia University — 2024

Dean's List Honors, The Chinese University of Hong Kong — 2023

The First Prize Scholarship of Liang Xi, Beijing Forestry University — 2019

The Stora Enso Scholarship, Beijing Forestry University & Stora Enso — 2018

Skills and Languages

Skills: Python Data Science Stack (Pandas, NumPy, SciPy, Scikit-learn, Statsmodels, PyTorch, TensorFlow, Seaborn, GeoPandas), ArcGIS/QGIS, R, Stata, Google Earth Engine, SQL (PostgreSQL, MySQL), LaTeX

Languages: English (Fluent), Mandarin (Native), Spanish (Intermediate)