

Expertise

Languages: Python, MySQL, STATA, R, Matlab, LATEX

 $\textbf{Data Science:} \ \ \text{Regressions, Classifications, Supervised \& Unsupervised Machine Learning, A/B Testing \& }$

Experimentation, Data Visual, Feature Selection and Engineering

Econometrics: Longitudinal Data, Time Series, Causal Inference, Survival Analysis, CGE Global Economy

Simulation, Treatment Effects, Bayesian Inference

Education

Ph.D., Applied Economics

Dec 2019

Virginia Polytechnic Institute and State University (Virginia Tech), Blacksburg, VA, USA

B.S., Economics Jun 2014

Nanjing Audit University, Nanjing, China

Experience

Postdoc Research Associate, Virginia Tech

Jan 2020-present

- Developed the Center for Agricultural Trade's global simulation model of 26 regions and 12 commodities and applied it to assess the counterfactual impacts of bilateral and multilateral trade concerns;
- Modeled 13-year global spatial supply and demand equations of agricultural commodities, with specified domestic and import price linkages to identify welfare impacts on both consumers and producers.

Data Science Fellow, Insight Data Science

Sep 2019-Dec 2019

- Consulted with an E-learning start-up company to evaluate their user referral program;
- Queried over 200K+ user-level data across 20+ tables in their relational database and created 30+ feature metrics to predict user referral rates;
- Built a machine learning pipeline by iteratively selecting features and examining feature importances to help increase the company's quality user referrals and accelerate business growth (with 85% model accuracy).

Graduate Researcher, Virginia Tech

Aug 2015-Sep 2019

- Proposed a demand system to examine market shocks caused by food safety outbreaks using 22-year monthly data, which found nonlinear changes in consumer preferences over imported commodities;
- Developed a hazard model to estimate the impact of non-tariff measures (NTMs) on US and global agricultural exports using millions of product-line trade data over 20 years, which quantified a 3%-8% increase in the probability of failure of trade relationships owning to the presence of NTMs;
- Applied an empirical model to estimate the trade import elasticities using preferential tariffs, which was referred by USDA Office of Chief Economist to estimate the 2018 Trade Damage Assessment and Farm Marekt Facilitation Program.

Instructor, Virginia Tech

Aug 2017-May 2019

- Designed syllabus and rubrics for the undergraduate level principle of microeconomics and organized small group activities to improve students' learning experience (full-semester);
- Lectured *math*, *statistics* and *econometrics* review sessions for first-year Ph.D. students' qualifying exams and *international trade and finance* for senior Ph.D. students' field research (multiple sessions).

President, Graduate Student Assembly, Virginia Tech

Aug 2017-May 2019

- Organized the annual fundraising event and raised a total of \$2300 to support graduate students' events, allowing us to grow connections among students, faculty and staff members;
- Facilitated the *Food, Health and Development Economics Lab* workshops and seminar activities to improve collaborations across research fields.