Xin Ning

919-931-7057 • xning1106@gmail.com • xin–ning • xning11

Expertise

Tools: Python, SQL, STATA, R, Matlab, Git, Tableau, Plotly, Mode Analytics

Packages: pandas, numpy, matplotlib, scipy, statsmodels, sklearn, tensorflow, sqlalchemy

Machine Learning: Linear and Logistic Regressions, Random Forests, Boosting, Support Vector Machines, K-nearest Neighbors, Clustering(K-means, Hierarchical, Kernel), Feature Engineering, Model Selection, Cross-validation

Statistical Modeling: Causal Inference, Experimental Design, A/B Testing, Difference-in-Differences, Propensity Score Matching, Synthetic Control Methods, Survival Analysis, Time Series Analysis, 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 a global simulation model to assess the counterfactual impacts of trade agreements and concerns to help inform industry leaders' and trade negotiators' policy implementation.
- Built a data pipeline to extract multiple web data sources and preprocess these unstructured and structured data for statistical modeling and economic impact analysis.

Data Science Fellow, *Insight Data Science Fellows Program* **Sep 2019–Dec 2019**
- Consulted with an online learning start-up company to evaluate their user referral program.
- Queried over 200K+ user-level granular data across 20+ tables in relational database and created 30+ feature metrics to predict user referral rates.
- Built a supervised classification model by iteratively selecting features and examining feature importance to infer quality user referrals and improve user acquisition effort (with +85% model accuracy on test set).

Graduate Researcher, *Virginia Tech* **Aug 2015-Sep 2019**
- Proposed a transitional demand system to examine market shocks caused by food safety outbreaks using panel data, which detected significant drifts in consumer preferences over imported products.
- Developed a survival 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 a pseudo-Poisson maximum likelihood model to estimate the trade import elasticities using preferential tariffs, which was cited by USDA Office of Chief Economist to estimate the 2018 Trade Damage Assessment and Farm Market 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 of Graduate Student Assembly, *Virginia Tech* **Aug 2017-May 2019**
- Organized the annual fundraising event to support graduate students' activities and to build connections among students and faculty members.
- Facilitated the department workshops and seminar events to improve collaborations across research fields.