Theodore Charm

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Work Experience

MonAfrique Lifestyle May 2022–Present

Research Scientist Intern

- · Lead a research project that examines the relationship between fair trade and human development
 - * Analyze time-series cross-sectional (TSCS) data on the trade laws of countries worldwide (i.e. restrictions on intellectual property, ability to make value-added goods, etc.) and evaluate their effects on human development (i.e. economic growth, a child's propensity to be productive in society, etc.)
 - * Employ various time-series models to examine TSCS data, such as **RE, FE, ARIMA, ADL, and ECM models**

Graduate Researcher Aug. 2016–Present

University of Texas at Austin

- * Analyzed political participation in Hong Kong in the Empirical Implications of Theoretical Models (EITM) framework
 - Examined survey results with **Generalized Linear Regression models, Maximum Likelihood Estimation** (MLE), Factor Analysis, and Extreme Bounds Analysis
- * Designed and implemented a survey experiment in Hong Kong on political participation
 - · Analyzed survey results using conjoint analysis and post-stratification
- * Working as a statistical consultant for Professor Kara Kockelman's research team on a project about traffic crashes at intersections across Texas
 - · Predict number of crashes and crash severities at Texas' intersections using MLE and machine learning models
 - · Compare model performances between MLE and ML models in predicting hotspot crash areas across Texas

Teaching Assistant

University of Texas at Austin

Aug. 2016-Present

ICPSR, University of Michigan

Jun. 2020-Aug. 2020

- · Collaborated in a team of nine graduate students assigned as TAs to one course
- Specialized in designing and implementing online surveys on students using Qualtrics
- · Led lab sessions for graduate-level **Bayesian statistics** courses comprised of 20 Ph.D. students and researchers with varying levels of domain knowledge

Education

University of Texas at Austin, TX

Aug. 2016-Present

Ph.D. in Government, Expected Aug. 2022

M.S. in Statistics

School of Oriental and African Studies, United Kingdom

Sep. 2013-Sep. 2014

MA in Taiwan Studies

University of Oxford, United Kingdom

Oct. 2009-Jun. 2013

BA and MMath in Mathematics

Skills

Technical: Experience in SQL, R, Python, Stata, SPSS, Tableau, Microsoft Excel

Languages: Native in Cantonese; fluent in Mandarin Chinese and English

Statistics/ Machine learning: Regression (OLS, GLS, maximum likelihood), Bayesian analysis, Time series, ANOVA, Supervised learning (classification and regression), Unsupervised learning (clustering and dimensionality reduction)

Other: U.S. Citizenship Status