GABRIEL BUTLER

CONTACT INFORMATION
Phone: (267) 752-5534
gabriel.butler@gmail.com
Website

EDUCATION
American Economic Association Summer Program, Michigan State University (2020)
- PhD level courses in Econometrics, Microeconomics, Mathematical Methods, Research Methods
- Wrote an empirical research paper: "Air Emissions and Disparities Among Developing Nations: An Analysis of the Kyoto Protocol"
- GPA: 3.62

B.A. – Business Economics, University of California, Los Angeles (2009)
- Japanese minor; Studied abroad in Japan during 2007-2008 school year
- GPA: 3.12 overall, 3.33 in major

EMPLOYMENT HISTORY
Research Analyst, Banking Section, Department of Research, Federal Reserve Bank of Philadelphia (2021-present)
- Reporting to economists Pablo D'Erasmo and Edison Yu
- Collected, validated and cleaned emissions data from Exiobase and employment data from BLS for working paper about the effects of carbon taxes on the stability of the US banking system
- Collected, validated, cleaned and analyzed Home Mortgage Disclosure Act (HMDA) data for working paper (draft not yet available) about trends in concentration in fin-tech lending
- Regularly collecting data and preparing charts about the real economy and financial system to inform FOMC decision-making

Teaching Assistant, Fels School of Government, University of Pennsylvania (2022-present)
- Fall 2022: Facilitated discussion sections for Public Economics course for 30+ MPA students
- Spring 2023: Oversaw lab sections for Data Analysis and Program Evaluation to replicate results from notable papers in RStudio using causal inference methods (RCT, IV, DiD, RDD) and helped 30+ MPA students with their final group projects

Teacher/Teaching Aide, UCLA Global Classroom in Nanjing, China (2016-2020)
- Facilitated discussion sections for introductory Micro/Macroeconomics, Intermediate Microeconomics, Probability Theory for 200+ students
- Served as teaching aide for Introduction to Computer Science (in C++) in Spring 2020

English Second Language Teacher, Various English schools around China (2010-2016)
- Developed and delivered courses in written and spoken English to 2,000+ students at universities and language institutes across the country
- Executed exam preparation curriculum for TOEFL and IELTS exams
- Designed and oversaw new English teacher onboarding and teaching curriculum

RESEARCH & PUBLICATIONS
Measuring the Effects of a Carbon Tax (2023)
- Estimation using input-output tables and a Merton model of the effects of a $100 carbon tax in 2019 on the on the market value of firms in different industries as defined by NAICS, the geographic variation in the effect of this shock, and its effect on community banks
- Losses to community banks were found to be driven mostly by a handful of industries and geographically concentrated, but the tax had substantial effects on a broad range of industries, equivalent to an average loss of about 2.5% of assets

[Provision of Transplant Education for Patients Starting Dialysis: Disparities Persist (2021)](#)
- Analysis of administrative dataset from United States Renal Data System (USRDS) covering virtually all dialysis patients aged 18 to 75 in the US between 2008 and 2018
- Used logistic regression and Cox proportional hazards models to measure the associations between patient characteristics and non-provision of transplant education, time to be added to transplant waitlist and time to transplant
- Revise & resubmit in the Journal of Surgical Research
- Presented in 2023 at [10th Annual PhD Excellence Initiative Summer Workshop](#) at the Federal Reserve Bank of New York

[Air Emissions and Disparities Among Developing Nations: An Analysis of the Kyoto Protocol (2020)](#)
- Natural experiment using difference in difference with regional and time fixed effects as well as a linear time trend to evaluate the effects of Kyoto Protocol on CO_2 emissions and deaths from particulate air matter
- Created personalized dataset consisting of 20 years of country level data using data taken from World Bank, United Nations, Our World In Data (Oxford) using R to clean and merge different datasets
- Advised by Prof. Jeff Wooldridge (MSU), Prof. Lisa Cook (MSU), Prof. Ben Rosa (Virginia Tech), Prof. Belinda Archibong (Columbia)
- Presented findings at closing ceremony of American Economic Association Summer Program
- Presented in 2021 by Anthony Ponce at 46th Annual California State University Social Science Research and Instruction Center on Social Science Student Symposium
    - Best Undergraduate Paper (2nd Place)
    - Best Use of Data and Quantitative Methods (1st Place)

Probability Theory Labs
- Engineered personalized set of R-based labs to enrich Probability Theory course offered by UCLA Global Classroom
- Published open source and publicly available learning content based on real datasets; used in course taught to 50+ students
- [Book link](#)

RELEVANT COURSEWORK
Mathematics: Calculus 1/2/3 (UIUC), Introduction to Proofs (Brandman), Mathematical Methods for Economists (Michigan State), Linear Algebra (Brandman), Probability Theory (UIUC), Mathematical Statistics (Maryville University), Differential Equations (Roger Williams), Real Analysis (Empire State College SUNY), Optimization (Fall 2023)

Statistics: Introduction to Statistics (UIUC), Introduction to Econometrics (UIUC), Advanced Econometrics (Michigan State), Machine Learning (Community College of Philadelphia)

Economics: Microeconomic Theory (UCLA), Macroeconomic Theory (UCLA), Advanced Microeconomic Theory (Michigan State), Money & Banking (UCLA), Labor Economics (UCLA), International Finance (UCLA), Finance (UCLA), Investments (UCLA)

AWARDS & HONORS
Monbukagakusho Honors Scholarship for Privately Financed International Students (2007 - 2008)
- Sole recipient from UCLA and one of two recipients from the entire UC system for highly selective, merit-based scholarship from the Japanese Ministry of Education