

R. JACOB APPLIN

Ph.D. Candidate, Department of Economics, University of Kentucky

☎ Please email me for my phone number ✉ Jacob.Applin@Outlook.com

Experience

Ph.D. Candidate, University of Kentucky, Lexington, KY

Aug. 2019 – Present

As a Ph.D. Candidate, I concurrently perform multiple roles, including but not limited to the following:

Researcher/Analyst

- Developed and successfully proposed two major independent research projects for dissertation
- Secured over \$8,000 in funding for purchasing access to proprietary data
- Present findings to dissertation committee members and mentors regularly to receive feedback
- Identify and author stories from data to highlight research outcomes

Data Programmer/Coder

- Build datasets suitable for analysis using Python, SQL, and R – e.g., using SQL in unison with Python and R to work with a big retail scanner database (raw size contains hundreds of billions of rows of data)
- Apply statistical concepts to understand economic phenomena – e.g., using Python to implement a logistic regression to estimate price elasticities
- Use causal inference techniques to identify treatment effects in A/B like settings
- Code programs and functions to automate and streamline common data tasks

Instructor

- Designed over 20 lectures for a statistics course to teach statistical methods such as hypothesis testing and regression
- Adapt material according to student needs and different class sizes ranging from less than 10 students to more than 50
- Teaching evaluations from students and mentors consistently outperform department-wide and university-wide averages

Research Assistant

- Collaborated with a team of research assistants to implement a fuzzy-merging algorithm to merge disparate datasets
- Produced a set of R programs for use by faculty members to clean some datasets owned by the economics department

Workshop Lead

- Revitalized workshops/events for graduate students after a lull due to COVID and boosted attendance by over 100%
- Organized over 20 professional and social workshops for graduate students

Graduate Assistant, Western Kentucky University, Bowling Green, KY

Aug. 2017 – May 2019

- Managed a team of 8 undergraduate research assistants working on an economic impact study for a local business.
- Oversaw a survey of over 1,000 customers to generate analytics on customer perception and retention
- Co-lead a workshop to teach SAS to faculty members
- Served as a graduate student representative on the university's graduate council

Technical Skills

Programming Languages: R, SQL, Python, Julia, SAS

Education

University of Kentucky

Aug. 2019 – Present

Ph.D. in Economics

GPA: 4.0

- Passed comprehensive examinations with distinction.
- Earned an M.S. in Economics en route to the Ph.D. in December 2020
- Relevant coursework: Statistical Methods, Probability, Econometrics, Causal Inference Methods

Western Kentucky University

Aug. 2017 – May 2019

M.A. in Applied Economics with a Concentration in Mathematics

GPA: 4.0

- Named Outstanding Graduate Student for the Gordon Ford College of Business.
- Relevant coursework: Machine-Learning Methods, Data Analytics, Forecasting, R Programming, SQL Programming

Murray State University

Aug. 2013 – May 2017

B.S. (Honors Diploma) in Economics with Minors in Mathematics and History

GPA: 3.96

- Relevant coursework: Numerical Analysis/Algorithms