# **Daryl Swartzentruber**

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# **EDUCATION**

# Ph.D., Statistics, The Ohio State University, May 2023

Dissertation: Regression Discontinuity Designs for Small Studies

Advisor: Eloise Kaizar

Certificate in College and University Teaching, The Ohio State University, May 2023

M.S., Statistics, The Ohio State University, December 2019

M.S., Mathematics, Eastern Kentucky University, August 2014

**Option: Statistics** 

### B.A., Mathematics, Transylvania University, May 2006

Graduated *summa cum laude* Minors: Education, History

## **TEACHING EXPERIENCE**

#### Assistant Professor, Centre College, 2023-present

Courses:

- MAT 130 (Introduction to Statistics): Fall 2023
- MAT 310 (Probability Theory): Fall 2023

#### **Graduate Instructor, The Ohio State University, 2018-2023**

Courses:

- STAT 2450.02 (Introduction to Statistical Analysis I, online): Summer 2022
- STAT 3301 (Statistical Modeling for Discovery I): Fall 2022
- STAT 3470.01 (Introduction to Probability and Statistics for Engineers, in-person): Summer 2018, Fall 2019, Spring 2020, Spring 2022
- STAT 3470.02 (Introduction to Probability and Statistics for Engineers, online): Fall 2020, Spring 2021, Summer 2021, Fall 2021

Lead Graduate Teaching Assistant, The Ohio State University, 2018-2019

#### Course:

• STAT 1450 (Introduction to the Practice of Statistics): Fall 2018, Spring 2019

# Graduate Teaching Assistant (Recitation Leader), The Ohio State University, 2017-2021 Courses:

- STAT 1430 (Statistics for the Business Sciences): Summer 2021
- STAT 1450 (Introduction to the Practice of Statistics): Fall 2017, Spring 2018, Fall 2018, Spring 2019
- STAT 2450 (Introduction to Statistical Analysis I): Fall 2017

# Graduate Teaching Assistant (Grader), The Ohio State University, 2017-2021 Courses:

- STAT 3302 (Statistical Modeling for Discovery II): Spring 2018
- STAT 4911 (Data Analytics Capstone): Spring 2023
- STAT 7540 (Theory of Stochastic Processes): Spring 2020

## High School Mathematics Teacher: Bryan Station High School, 2015-2017

• Taught AP Statistics for two years and a general statistics class for one year, as well as other mathematics courses.

# High School Mathematics Teacher: Bourbon County High School, 2009-2015

• Taught AP Statistics for five years as well as other mathematics courses.

#### **RESEARCH EXPERIENCE**

## **Graduate Student, The Ohio State University, 2019-2023**

- Working with my advisor, Dr. Eloise Kaizar, to develop new methods and provide practical advice for regression discontinuity designs for small studies.
- Collected data on my own teaching strategies to analyze with our methods.
- Working with a fellow graduate student on applying causal inference methods to NBA play-by-play data.

#### **PUBLICATIONS**

Swartzentruber, Daryl, & Kaizar, Eloise (2022). Small Study Regression Discontinuity Designs: Density Inclusive Study Size Metric and Performance (under review at *Journal of Research on Educational Effectiveness*). <a href="https://doi.org/10.48550/arXiv.2209.01396">https://doi.org/10.48550/arXiv.2209.01396</a>.

#### PRESENTATIONS AND TALKS

Swartzentruber, Daryl. A Comparison of Regression Discontinuity Effect Estimation for Small Samples [Speed/Poster Presentation]. Joint Statistical Meetings. August 2022. Washington, D.C.

Swartzentruber, Daryl and Sasan, Prateek. *The Causal Effect of the Two-for-One Strategy in the NBA* [Poster Presentation]. University of Connecticut Sports Analytics Symposium. October 2022. Storrs, CT.

Swartzentruber, Daryl. *Regression Discontinuity Designs for Small Studies*. Kenyon College Math Mondays. November 2022. Gambier, OH.

#### **CONFERNCES ATTENDED**

Carnegie Mellon Sports Analytics Conference, Pittsburgh, PA, November 2023 University of Connecticut Sports Analytics Symposium, Storrs, CT, October 2022 Joint Statistical Meetings, Washington, D.C., August 2022 Electronic Conference on Teaching Statistics, Virtual, May 2022

#### **AWARDS AND HONORS**

Graduate Associate Teaching Award (GATA), The Ohio State University, 2020 Thomas and Jean Powers Teaching Award, The Ohio State University, 2019 McKee Scholarship, Delta Sigma Phi, 2017 George Stopp Academic Achievement Award, Transylvania University, 2006 Omicron Delta Kappa Honor Society, Transylvania University, 2005 Phi Alpha Theta Honor Society, Transylvania University, 2005 William T. Young Scholarship, Transylvania University, 2002-2006

#### OTHER PROFESSIONAL EXPERIENCE

AP Statistics Reader, Educational Testing Service, 2016-present Consultant, AdvanceKY, 2013-2017

#### **SERVICE**

Ohio state science fair judge, 2019.

#### **PROFESSIONAL MEMBERSHIPS**

American Statistical Association (ASA)