TIMOTHY RUEL

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EDUCATION

Northwestern University — Evanston, IL
Ph.D. Candidate in Statistics — Expected Jun 2024
Master of Science in Statistics — Sep 2019 - Mar 2022
Data Science Fellow — Awarded Sep 2019

University of Illinois at Urbana-Champaign — Champaign, IL
Bachelor of Science in Applied Mathematics and Statistics — Aug 2014 - May 2018

WORK EXPERIENCE

The STEPP Center — Institute for Policy Research, Northwestern University
Research Assistant — Apr 2019 - Present

- Programmed an R package version of the webtool thegeneralizer.org which helps K-12 researchers design sample recruitment plans that improve generalizability of their studies and report when they may or may not generalize well to other populations
- Evaluated methods and practices of 8 research clearinghouses and wrote report documenting best practices and areas of improvement for each one
- Provided assistance in the administration of two professional development workshops for education researchers funded by the Institute of Education Sciences and the National Science Foundation, respectively

Faculty Senate Salary and Budget Committee — Northwestern University
Data Analyst — May 2022 - Jun 2022

- Performed the cleaning and data wrangling of a dataset containing information on the salaries of faculty members at Northwestern University as part of a consulting project for the Northwestern Faculty Senate Salary and Benefits Committee
- Created plots and tables illustrating the faculty's salaries and percent raises during the previous 8 years in addition to their projected losses over the next 40 years as a result of a six month freeze in retirement benefits due to COVID-19 spending cuts

Department of Sociology — Georgia State University
Research Assistant — Jun 2017 - Aug 2017

- Managed cleaning and preprocessing of a dataset with over 50,000 observations documenting infrastructure and environment of low-income Atlanta neighborhoods
- Conducted a principal component analysis to reduce dimensionality of dataset and identify neighborhood characteristics most strongly associated with danger and incivility

TEACHING EXPERIENCE

Department of Statistics — Northwestern University
Teaching Assistant — Sep 2020 - Present

- STAT 301-2 Data Science II with R (Winter 2023)
- STAT 301-1 Data Science I with R (Fall 2022)
- STAT 353-0 Advanced Regression (Spring 2022)
- STAT 328-0 Causal Inference (Winter 2022)
- STAT 420-2 Introduction to Statistical Theory & Methodology II (Winter 2022)
- STAT 320-2 Statistical Theory & Methods II (Winter 2021)
- STAT 210-0 Introduction to Probability & Statistics (Fall 2020, Spring 2021, Fall 2022)

PROFESSIONAL DEVELOPMENT

edX, Inc. — MITx Online Course
Introduction to Computer Science and Programming using Python — Completed Jun 2018

PROGRAMMING SKILLS

R (advanced), Python (intermediate), SQL (intermediate), SAS (intermediate)