TIMOTHY RUEL

timothyruel2024@u.northwestern.edu · (847) 840-0901 · Website · GitHub · LinkedIn
1630 West Balmoral Avenue, Apt 2B, Chicago, IL 60640

EDUCATION

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

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

EXPERIENCE

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

- 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

Division of Intercollegiate Athletics — University of Illinois
Mathematics Tutor — Sep 2017 – May 2018

- Tutored 10 students taking college classes in calculus and linear algebra
- Formulated lesson plans to give students practice with key concepts and keep them on track with assignments

Georgia State University — Atlanta, GA
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

HONORS

Data Science Initiative — Northwestern Institute on Complex Systems
Data Science Fellow — Awarded Sep 2019

PROJECTS

The "generalizeR" R Package — Jul 2020 - 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

Visualization of NU Faculty Retirement Benefits Loss during COVID-19 — 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

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)