# TIMOTHY RUEL

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### **EDUCATION**

**Northwestern University** 

Ph.D. Candidate in Statistics Master of Science in Statistics

**University of Illinois** 

Bachelor of Science in Applied Mathematics and Statistics

Evanston, IL Expected Jun 2024 Sep 2019 - Mar 2022 Urbana-Champaign, IL Aug 2014 - May 2018

#### EXPERIENCE \_\_\_

# The STEPP Center Research Assistant

Institute for Policy Research, Northwestern University 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**

Mathematics Tutor

University of Illinois 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

Research Assistant

Atlanta, GA

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**

Data Science Fellow

Northwestern Institute on Complex Systems 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)