

TIMOTHY RUEL

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1630 West Balmoral Avenue, Apt 2B, Chicago, IL 60640

EDUCATION

Northwestern University

Ph.D. Candidate in Statistics

Master of Science in Statistics

Evanston, IL

Expected December 2024

September 2019 - March 2022

University of Illinois at Urbana-Champaign

Bachelor of Science in Applied Mathematics and Statistics

Champaign, IL

August 2014 - May 2018

EXPERIENCE

CCC Intelligent Solutions

R&D Data Science Intern

Chicago, IL

June 2023 - Present

- Utilized statistical expertise to gain familiarity with company's data architecture and industry practices
- Conducted exploratory data analysis to identify parts of damaged vehicles in automotive insurance claims dataset (>1M rows) with inconsistent ground truth labels across different trims
- Designed 3 layer MLP neural network incorporating prior existence and damage rates with corresponding confidence metrics for individual parts as means of accounting for above labeling discrepancy
- Collaborated with data science team regularly to discuss progress, present findings, and identify areas of improvement

The STEPP Center

Research Assistant

Institute for Policy Research, Northwestern University

April 2019 - Present

- Developed R package implementation of webtool [thegeneralizer.org](#) aimed at guiding K-12 education researchers through process of designing sample recruitment plans that improve generalizability of their studies
- Evaluated methods and practices of 8 research clearinghouses and documented best practices and areas of improvement for each
- Aided in administration of two professional development workshops for education researchers funded by Institute of Education Sciences and National Science Foundation

Faculty Senate Salary and Budget Committee

Data Analyst

Northwestern University

May 2022 - June 2022

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

Department of Sociology

Research Assistant

Georgia State University

June 2017 - August 2017

- Managed cleaning and preprocessing of dataset with over 50,000 observations documenting infrastructure and environment of low-income Atlanta neighborhoods
- Conducted 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 September 2019

SKILLS

Programming: Python, R, SQL, SAS, Excel

General: Critical Thinking, Leadership, Teamwork, Communication, Adaptability, Time Management