Nicholas Vietto

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Professional Experience

University of Nebraska-Omaha

PhD Candidate

School of Criminology and Criminal Justice

August 2020 - Present

- Developed machine learning models used to predict and classify risk for delinquency.
- Conducted data collection, curation, wrangling, and preprocessing for statistical analyses in R using both causal inference and predictive models.
- Developed a data visualization technique to examine and plot interaction/moderation models, enhancing interpretability for two publications.
- Authored and collaborated on several studies for scientific publishing and conferences.

University of Nebraska-Omaha

Graduate Teaching Assistant

School of Criminology and Criminal Justice

August 2020 - Present

• Instructed and developed multiple undergraduate courses centered on quantitative subjects, including statistics and research methods using Quarto and RMarkdown.

Wayne State University

Researcher

Department of Criminology and Criminal Justice

August 2019 - August 2020

• Planned and executed analyses for a project that entailed evaluating the impacts of environmental adversity, genetic polymorphism, and behavioral outcomes.

Education

University of Nebraska-Omaha

Ph.D. Quantitative Criminology and Criminal Justice

Expected Spring 2025

Dissertation: Classifying Risk for Delinquency in the Future of Families and Child Well-Being Study: A Data-Driven Approach Using a Feed-Forward Neural Network

Wayne State University

M.S. Criminal Justice 2020

Oakland University

B.A. Biological Science 2016

Professional Development and Specialized Quantitative Training

- Future of Families and Child Well-Being Study Summer Data Workshop, Columbia University (2023)
- Machine Learning: Uncovering Hidden Structures in Data, ICPSR Summer Program at University of Michigan (2023)
- Longitudinal Structural Equation Modeling, Department of Psychology at University of Nebraska- Lincoln (2022)
- Structural Equation Modeling, Department of Psychology at University of Nebraska-Lincoln (2022)
- Mixed Models, School of Criminology and Criminal Justice at University of Nebraska-Omaha (2021)

Skills

- Statistical Expertise: Machine Learning (caret & tidymodels), Predictive Modeling, Causal Inference, Experimental Design
- Software: Proficient in R, HTML/CSS, LaTeX, git; familiar with Python, SQL, Julia, Typst
- Technical Skills: Data Visualization, Package Development (R), Reproducible Workflows in Quarto, Data Wrangling, Web Scraping, Dashboards