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. 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

- FFCWS Summer Data Workshop Attendee, 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