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 to enhance the evaluation of risk for delinquency across multiple theoretical domains.
- 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.
- Developed an R package that streamlines sample generation from multiple probability distributions, enabling quick dataset creation for demonstrations, troubleshooting, and teaching.

Wayne State University

Researcher

Department of Criminology and Criminal Justice

August 2019 - August 2020

Conducted research evaluating how environmental adversity and genetic polymorphisms influence behavioral outcomes.

Education

University of Nebraska-Omaha

Ph.D. in Quantitative Criminology and Criminal Justice

Expected Fall 2025

Dissertation: Classifying Risk for Delinquency Across Theoretical Domains 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

- Applied Bayesian Statistics for Social Scientists, ICPSR Summer Program at University of Michigan (2025)
- 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, 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