

Claudia Clinchard

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Roanoke, Virginia – (402)310-8334

Researcher and data scientist with 7+ years of experience turning complex data (4,000+ variables) into actionable insights. Skilled in R, Python, Tableau, SQL, JMP, SPSS, and Mplus for predictive modeling, machine learning, and data storytelling.

Experience

Statistical Collaborator | Statistical Applications & Innovation Group, Virginia Tech, Blacksburg, Virginia

May 2024 – Present

- Collaborated with cross-functional teams to transform complex datasets into actionable insights that informed data-driven strategies
- Built predictive models (logistic regression, GLMM) to identify key drivers of outcomes
- Collaborated on the design and teaching of short course workshops for over 20+ students and researchers to upskill teams in statistical modeling
- Partnered with clients to define analytic questions, streamline data processes, and deliver actionable findings

Research Assistant and Project Manager | Virginia Tech, Blacksburg, Virginia

July 2021 – Present

- Cleaned and structured large-scale datasets (4,000+ variables), improving analysis efficiency by 50%
- Applied advanced analytical techniques (e.g., structural equation modeling, machine learning, and regression analyses) to uncover predictive patterns
- Supervised and mentored a team of 10+ researchers in data management, statistical modeling, and workflow optimization
- Authored 12 peer-reviewed publications (5 as first author), and presented at 4 national conferences (30+ attendees)

Freelancer | Remote, United States

January 2025 – Present

- Advised clients on statistical modeling in R and provided feedback on research writing

Education

Virginia Tech, Blacksburg, Virginia

Ph.D., Psychology

Expected May 2026

M.A., Data Analysis and Applied Statistics

Expected May 2026

M.S., Psychology

April 2023

University of Nebraska-Lincoln, Lincoln, Nebraska

B.A., Psychology

May 2021

Skills

- **Programming & Data Tools:** R, Python (pandas, NumPy, scikit-learn), SQL (MySQL and SQLite), Git/GitHub, JMP, SPSS, and Mplus
- **Data Visualization:** Tableau, ggplot2, Power BI, Excel,
- **Modeling:** Regression, GLM, GLMM, SEM, GAM, decision trees, K-means, PCA
- **Other:** Workflow automation, psychometrics, RMarkdown, GIS/GeoPandas

Selected Projects

- Automated data pipelines in R, reducing preprocessing time by 80%
- Longitudinal modeling of 10 years of data via SEM
- Multi-wave dataset integration using advanced imputation (FIML)
- Dimension reduction to extract latent behavioral constructs
- Predictive modeling (student college placement, sales forecasting)
- Behavioral time series analysis to detect and predict developmental patterns