Mark Krysan
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Education

Grinnell College, Grinnell, Iowa
Bachelor of Arts, Mathematics and Philosophy, GPA: 3.7   Expected May 2024

Relevant Coursework: Probability and Statistics I and II, Statistical Modeling, Bayesian Statistics, Real Analysis, Measure Theory.

Research Experience

Grinnell College, Statistics Department
Mentored Advanced Project, June 2023- December 2023.
Advisors: Jonathan Wells, Ryan Miller.
During this project, I designed an outline for the goals of the research, using an extensive literature review and assessment to determine a successful route. My main tasks for the research included data cleaning and processing as well as model building, diagnosis, and analysis. I also designed and ran a simulation study. I then prepared and gave presentations on our work, requiring data visualization and clear communication.

Course Embedded
"Overcoming Overdispersion in Poisson Regression: quasi-Poisson and Negative Binomial Regression". Mark Krysan. Course: Probability and Statistics 2.
"Measuring the Impact of COVID-19 on Iowa's High School Students' Test Scores on Math and English Language Arts". Mark Krysan, Jungbin Im, Aiden Choate. Course: Statistical Modeling.

Leadership/Service

Grinnell Mathematics Student Educational Policy Committee
Treasurer August 2023 - Present.
Planned events for the mathematics department to foster an inclusive community, including an Equity and Inclusion workshop with faculty and students. Worked with Professors to better improve the calculus curriculum in the Mathematics department. Advocated on behalf of mathematics students.

Technical Skills

Proficient in: R, LaTeX, Microsoft Suite.

Employment

Grinnell College, Mathematics Department
Student Statistics and Calculus Tutor, August 2023.
Worked as a tutor for drop-in sessions for Calc 1 and 2, as well as intro Statistics at the Grinnell Math Lab. Used the Socratic method to help students come to a better understanding of the material that they had questions about. Helped to create a welcoming and inclusive environment.
Grinnell College, Mathematics Department
Student Calculus Grader, January 2023 – May 2023.
Developed rubric for assessment of calculus homework focused on holistic assessment. Provided qualitative feedback for errors in assessments.

Manuscript in Preparation

"Modeling the Lateral Position of Driving Simulators with Applications to Cannabis Impaired Driving Performance". Mark Krysan, Ryan Miller, Jonathan Wells. Expected Spring 2024.

Presentations

MASSS (Mathematics and Statistics Student Seminar), Grinnell, Iowa, September 2023. Mark Krysan, Max Worth. "The Impact of Cannabis on Driving: Modeling Driving Time Series Data" (Lecture).

Midstates Consortium for Science and Math, Chicago, Illinois, November 2023. Mark Krysan, Jonathan Wells, Ryan Miller. "Analysis of Driving Performance of Drivers Dosed by Cannabis using a Third Order Autoregressive Time Series Model" (Poster).