

## Profile

Highly analytical and dedicated professional with strong commitments to leverage 20+ years of teaching experience in mathematics, probability, statistics, data science, spatial statistics, and data visualization to address real-world challenges within the industry. Knowledgeable in designing and integrating multiple data sources, models, and software tools with scientific and engineering workflows for data analysis and decision support. Expertise in leveraging advanced analytical techniques to derive actionable insights and solve complex problems. Expertise in data manipulation, statistical modeling, and geospatial analysis with passion for developing innovative solutions to drive business objectives and inform strategic decision-making. Proficient in ArcGIS Pro, R, SQL, HTML, and LaTeX.

## Areas of Expertise

- Machine Learning & Data Science
- Data Visualization & Reporting
- Project Planning & Execution
- Data Wrangling & Exploration
- Geographic Information Systems (GIS)
- Predictive Modeling & Analytics
- Cartography & Geographic Visualization
- Pattern Recognition
- Data & Statistical Modeling
- Spatial Data Analysis
- R Programming
- Cross-Team Collaboration

## Professional Experience

Ithaca College, Ithaca, NY  
Professor of Mathematics

2001 to Present

Engage students and colleagues as professor of mathematics with strong foundation in probability, statistics, and data visualization. Develop and deliver innovative courses, such as Spatial Statistics with ArcGIS Pro, Modern Data Science with R, and Interactive Graphics with a focus on improving students' performance. Leverage strong knowledge of R and ArcGIS to conduct research and provide statistical consulting, including climate change impact studies and power grid load forecasting. Collaborate with cross-functional teams to communicate complex mathematical and statistical findings through verbal, written, and graphical communication skills.

- Predicted utility and environmental changes with advanced statistical modeling to influence strategic decisions in various industries.
- Led the development and introduction of new courses in data science and spatial statistics to address evolving educational needs.
- Leveraged strong knowledge in exercise science as statistical advisor for master's theses, demonstrating interdisciplinary collaboration.
- Prepared and delivered numerous invited presentations, showcasing thought leadership and expertise in the academic community.
- Authored and published two innovative textbooks integrating R programming into the college mathematics curriculum to modernize courses.
- Quantified effectiveness of honors program in attracting students through implementation of an admissions A/B test.
- Headed and mentored cross-functional team of four academics from different disciplines as principal investigator of four-year NSF grant, resulting in multiple publications and presentations.

*Additional Experience as **Director of the College Honors Program and Chair of the Math Dept.** at Ithaca College, Ithaca, NY*

## Education & Credentials

Doctor of Philosophy (PhD) in Mathematics (Stochastic Processes) | Syracuse University, Syracuse, NY

Master of Science (MS) in Applied Statistics | Syracuse University, Syracuse, NY

Master of Science (MS) in Mathematics | Syracuse University, Syracuse, NY

Bachelor of Science (BS) in Mathematics | State University of New York, Cortland, NY

Bachelor of Science (BS) Exercise Science | Ithaca College, Ithaca, NY

### Professional Developments

- DataCamp: Completed: 40 courses, 4 tracks, and 3 projects, over 169,690 XP
- Passed Actuary Exam 1 (10)

### Miscellaneous

- Patent
- Academic Vita
- [briefedbydata.substack.com](https://briefedbydata.substack.com)
- [sustainabilitymath.org](https://sustainabilitymath.org)