Ross Lauterbach

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PROFESSIONAL EXPERIENCE

Scholastic Inc. New York, NY **September 2025 - Present**

Data Scientist

- Developed and deployed an end-to-end cancellation risk model using Python and SQL within AWS SageMaker and Redshift to automate scoring and enable proactive support interventions for upcoming book fairs
- Engineered a propensity model to predict seasonal magazine purchase likelihood, allowing the marketing team to optimize resource allocation by targeting high-probability accounts for email campaigns
- Architected extensive SQL scripts for automated ETL processes and data mart creation, streamling cross-divisional data access and delivering actionable insights to executive leadership to drive strategic decision-making

Department of Mathematics and Statistics, Hunter College, New York, NY **August 2025 - Present**

Adjunct Lecturer

- Instructed over 60 undergraduate students on foundational and advanced statistical concepts, including probability, statistical inference, and linear models, through the Elementary Statistics and Introduction to Applied Statistics courses
- Managed all aspects of course instruction, including curriculum design, developing and grading assignments, and providing dedicated office hours for one-on-one student support

Department of Mathematics and Statistics, Hunter College, New York, NY **August 2024 – May 2025**

Research Assistant

- Conducted statistical research on "momentum" in the NBA under the guidance of Dr. Sylvan, applying multilevel regression, smoothing methods, and numerical optimization to analyze complex sports data
- Utilized R, Python, and SQL to develop data analysis script and manage relational databases for statistical modeling of NBA game dynamics. Presented findings on NBA momentum at MathSport 2025 and Hunter Research Symposium

U.S. Census Bureau, Washington, DC **June 2024 – August 2024**

Data Scientist (Coding it Forward Fellowship)

- Utilized Python and R to analyze, visualize, and join over 200gbs of import and export transactions extracted using PostgreSQL, integrating AWS services and robust ETL processes to streamline data ingestion
- Engineered and deployed supervised machine learning models in Python, including XGBoost and Random Forest classifiers, to precisely infer the country of origin for trade data entries with missing identifiers, thereby improving data integrity and processing efficiency. Achieved an 80% match rate, far above the standard for survey response
- Partnered with survey statisticians and the Chief of the Trade Regulations Branch to develop advanced visualizations and analytical reports with PowerBI, effectively translating complex insights into actionable intelligence for strategic decision-making. Presented recommendation to Associate Director of Economic Programs based on findings

National Museum of Mathematics, New York, NY **July 2023 - October 2023**

Exponent Fellow

- Engaged 200-900 daily visitors of diverse ages and backgrounds by presenting advanced mathematical concepts through interactive exhibits, improving visitor understanding and engagement
- Led an initiative to enhance operational efficiency on the museum floor by leveraging forecasting in Python, data management in PostgreSQL, and visualization in Tableau to automate scheduling, analyze visitor data, and predict attendance for the upcoming school year
- Collaborated with esteemed visiting professors in mathematics and computer science to coordinate events covering diverse topics, attracting 500+ visitors in just two months

EDUCATION

Hunter College, City University of New York **May 2025**

Master of Arts in Applied Mathematics and Statistics | Concentration in Statistics

Angeliki D. Cutchis Prize for Mathematics

Binghamton University, State University of New York **May 2023**

Bachelor of Arts in Mathematical Sciences | Minor in Digital and Data Studies

Helen P. Beard Award for Excellence in Undergraduate in Mathematics

Paul D. Schreiber High School **June 2020**

QuestBridge College Match Finalist

TECHNICAL SKILLS

Programming: Python, R, SQL, SAS, C++, HTML

Python Libraries: NumPy, Pandas, Polars, Matplotlib, Seaborn, Statsmodels, PySpark, SciPy, Scikit-learn, TensorFlow

Tools: DBeaver, AWS, PowerBI, Microsoft Office, Apache Spark, Microsoft Azure, Databricks