Antonella D. Basso

adpbasso98@gmail.com | +1-(978)-319-2922 | LinkedIn | Portfolio

EDUCATION

Brown University | School of Public Health — **Providence, RI**
Master of Science in Biostatistics — *May 2023*

- **Coursework:** Fundamentals of Probability and Statistical Inference, Applied Generalized Linear Models, Applied Longitudinal & Multilevel Data Analysis, Bayesian Statistical Methods, Causal Inference & Missing Data, Statistical Programming in R, Practical Data Analysis, Statistical Learning & Big Data, Fairness in Automated Decision Making

Agnes Scott College — **Decatur, GA**
Bachelor of Arts in Mathematics & Philosophy | Minor in Artificial Intelligence | GPA: 3.63 - Cum Laude — *May 2021*

- **Awards & Honors:** Honors Scholar, Honorable Mention: Archive of Excellence, Mathematics Departmental Award
- **Leadership & Involvement:** Mathematics Club, Women In Technology (WIT CAMPUS), I.Am.GradComputing Workshop (Georgia Tech), Global Journeys (Reykjavik, Iceland)
- **Coursework:** Applied Statistics, Differential Equations, Calculus I/II, Linear Algebra, Linear Programming & Network Flow, Mathematical Modeling & Applications, Problem Solving in Python, Foundations of Data Science, Introduction to AI, Logic I/II, Analytic Philosophy, Theories of Equality, Existentialism

Liverpool Hope University — **Liverpool, England**
International Student Exchange Program (ISEP) — *September 2019 - December 2019*

- **Leadership & Involvement:** Women's Lacrosse Team, STEM Women Conference
- **Coursework:** Multivariable Calculus, AI/ML, Programming in C/C++, Group Theory, Chaos Theory

WORK & RESEARCH EXPERIENCE

Brown University | School of Public Health — **Providence, RI**
Biostatistics Master's Thesis — *September 2022 - May 2023*

- **Developed an intuitive causal-based method for fair predictive modeling** that appeals to path-specific effects and penalized maximum likelihood estimation under a counterfactual reasoning framework through extensive quantitative research.
- **Illustrated a practical application** in a research paper by implementing the proposed methodology on a simulated biased dataset to remove direct discrimination from predictions.
- **Showcased research impact** by open-sourcing code on GitHub and presenting completed work at Brown's public health research day, fostering collaboration and knowledge dissemination.

Massachusetts Institute of Technology *(Community Innovators Lab)* — **Cambridge, MA**
Research & Policy Analyst, Internship — *July 2022 - September 2022*

- **Helped inform decisions and policy initiatives** by conducting research on the impact of current LTSS financing models on the care workforce and analyzing data pertaining to job quality.
- **Facilitated the dissemination of insights** by synthesizing key findings and learning points into an accessible report and providing other research support to team members as needed.

Harvard University | T.H. Chan School of Public Health — **Boston, MA**
Biostatistics Researcher, Internship — *May 2020 - March 2021*

- **Contributed to collaborative environmental health research** by preprocessing and analyzing groundwater data collected near coal ash sites across the Midwest under the mentorship of Harvard faculty.
- **Explored the prominence of coal ash contamination** amongst upgradient wells through principal component analysis and cluster-based machine learning in Python and R.
- **Addressed the magnitude of the problem and the impact of coal ash on health outcomes** by presenting key research findings at Harvard's annual symposium.

SKILLS & INTERESTS

Programming: Python, R, Stata, C/C++, Basic HTML/CSS, Git, Unix

Skills: Data Wrangling, Data Visualization, Statistical Analysis, Machine Learning, Model Evaluation & Validation

Languages: English, Spanish, Conversational French, Basic ASL

Interests: Causal Inference, AI Fairness, Analytic Philosophy, Antique Glassware, Entomology, Sudoku, Podcasts, Travel