Gregory Lanzalotto

Philadelphia, PA

glanza@wharton.upenn.edu

Education

University of Pennsylvania Philadelphia, PA
BA in Mathematical Economics, Minor in Statistics May 2022
GPA: 3.91

Colgate University Hamilton, NY
GPA: 3.93 September 2018 - May 2019

Research Experience

Works in Progress

"Reforming Police Misconduct Investigations." With Bocar Ba, Dean Knox, Rachel Mariman, Jonathan Mummolo and Marıa Aranzazu Rodrıguez Uribe.

- Using unique access to an archive of administrative records on civilian complaints against police, this multi-wave experimental study seeks to assess how Philadelphia residents understand and perceive the current civilian complaint process, and systematically evaluate the impact of transparency initiatives on civic engagement and public trust in police.

"Computational Analysis of Police Body-worn Camera Footage." With Olga Russakovsky, Dean Knox, Jonathan Mummolo, and Brandon Stewart.

- By developing a novel system using computational techniques for audiovisual analysis to convert body-worn camera footage into written timelines (akin to movie scripts), this project aims to provide detailed, moment-to-moment accounts of police-civilian encounters. The new system will provide an entirely new perspective on police-civilian interactions beyond traditional officer-generated reports, which will enable more effective supervision and accountability for misconduct.

"ffgrep: Scalable Approximate String Matching." With Dean Knox and Christopher Lucas.

- Approximate substring searching is a common but computationally demanding task in bioinformatics and text analysis. We present a new approach that recasts string search as a multiple convolution problem, then exploits highly efficient fast Fourier convolution techniques. This approach, which we call ffgrep, computes and caches the spectra of a target corpora, drastically reducing the cost of subsequent searches.

Senior Thesis
Advisors: Margaux Luflade and Jere Behrman

"Do Students From Elite High Schools Apply to College Differently: Evidence from Tunisia."

- Using nationwide administrative data from Tunisia, I model high school students' college application behavior. I utilize a sharp discontinuity in the Tunisia education system to create a dataset of similar students who either attend an elite high school or attend a local high school. Using this dataset I estimate application behavior using an ordered logit model, testing for a difference in parameters between the two groups.

Work Experience

Miami-Dade Police Department Miami, FL
Researcher in Residence Summer 2022

Bates White Economic Consulting   Washington, DC
Summer Consultant   Summer 2021

Wharton Analytics Consultants   Philadelphia, PA
Analyst   January 2020-December 2020

Penn Wharton Budget Model   Philadelphia, PA
Research Assistant   Summer 2020

Relevant Coursework

Economics Writing Seminar in Economics, Intermediate Microeconomics, Intermediate Macroeconomics, Independent Study, Honors Seminar, Microeconomic Theory*, Experimental Economics*

Statistics Statistics for Economists, Econometrics, Probability, Statistical Learning & Causal Inference, Applied Econometrics (1 & 2)*, Applied Regression and Analysis of Variance*, Stochastic Models*

Math Calculus II, Calculus III, Linear Algebra & Differential Equations, Real Analysis (1 & 2), Computational Linear Algebra*

Computing and Optimization Computer Programming, Programming Languages and Techniques, Linear, Nonlinear, and Integer Optimization*

(* indicates graduate level)

Skills

Programming Proficient in R and Python (as well as associated machine learning and data analysis packages). Intermediate in Stata, Java, and OCaml.

Computer Proficient in LaTeX. Comfortable with CSS, HTML, Git

Language Native in English, Limited Working Proficiency in Spanish

Other

Cross Country and Track, Colgate University   Hamilton, NY
Division 1 Varsity Athlete
- Scoring member of team at 2019 Patriot League Indoor Championships