J.J. NADDEO | Curriculum Vitae

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Current Position

POSTDOCTORAL FRITZ FAMILY FELLOW

In collaboration with Professor Michael Bailey at the Massive Data Institute and Professor Neel Sukhatme at the Institute for Technology Law & Policy

Education

GEORGETOWN UNIVERSITY
May 2022
PhD in Economics
Washington, D.C.
Dissertation title: Essays in Political Economics and Crime

RUTGERS UNIVERSITY- CAMDEN
May 2016
Bachelor of Arts in Economics and Math
Camden, NJ
GPA: 4.0, summa cum laude

RUTGERS UNIVERSITY- CAMDEN
May 2015
Bachelor of Science in Physics
Camden, NJ
GPA: 4.0, summa cum laude

BURLINGTON COUNTY COMMUNITY COLLEGE
May 2012
Associate of Science in Physics
Mount Laurel, NJ

Experience (Research & Industry)

RESEARCHER
Oct 2021 -
Justice Innovation Lab
Washington, D.C.
Assist in developing ETL data pipeline and recommend policies to reduce racial disparities in prosecutor's offices in multiple jurisdictions.

DATA ANALYST
May 2022 -
Free Our Vote
Washington, D.C.
Assist in merging and analyzing data, as well as planning and execution of RCTs.

DOCTORAL FRITZ FAMILY FELLOW
Oct 2021 - May 2022
Massive Data Institute <> Institute for Tech Law & Policy @ Georgetown Univ.
Washington, D.C.
Led research aimed at identifying and reducing racial disparities in criminal legal system in mid-sized southern jurisdiction.

CONSULTANT
Jan 2022-Apr 2022
Equal Rights Center
Washington, D.C.
Created automated bot to conduct correspondence tests for racial discrimination in hiring practices. Conducted final data analysis.

CONSULTANT
Jan 2020
World Bank
Washington, D.C.
Assisted in analyzing national labor force survey data from Thailand and Vietnam.

RESEARCH ASSISTANT
Sept 2018-
Georgetown University
Washington, D.C.
RA for Laurent Bouton, Arik Levinson, and Ben Solow on multiple projects.

RESEARCH ASSISTANT/RESEARCHER
Sept 2013-Sept 2016
Rutgers University-Camden
Camden, NJ

Worked in Bacterial Cell Biology Lab (biology department) and the Laser Materials Interactions Lab (physics department). Also provided research assistance for multiple projects in Economics department.

Teaching Experience

GEORGE WASHINGTON UNIVERSITY LAW SCHOOL

Nov 2021
Washington, D.C.

Guest lectures on "Data-Driven Criminal Justice Reform".

GEORGETOWN UNIVERSITY

Jun 2016-Dec 2020
Washington, D.C.

Lecturer, Department of Economics

- CORE Teagle fellow
- Developed novel course using CORE curriculum for Introduction to Macroeconomics (Summer 2018/2019)
- Used coding (R and MATLAB) to help understand Dynamic Programming and Econometrics concepts for PhD Math camp (co-taught with Peter Caradonna

GEORGETOWN UNIVERSITY

Sept 2017-Dec 2020
Washington, D.C.

Teaching Assistant, Department of Economics

Assisted in administering Introduction to Macroeconomics (Fall 2017) and Microeconomics (Spring 2018/Fall 2018/Spring 2019)

RUTGERS UNIVERSITY- CAMDEN

Sept 2015-May 2016
Camden, NJ

Lecturer, Department of Physics

Developed course material and taught the following courses:

- Lasers and Laser Physics (50:750:305)
- Modern Physics (50:750:232)
- General Physics I and II
- Introduction to the Earth (50:460:101) (online)

RUTGERS UNIVERSITY- CAMDEN

Sept 2013-May 2016
Camden, NJ

Physics Lab Instructor, Department of Physics

Job Market Paper

PROSECUTORIAL DISCRETION AND RACE IN A SOUTHERN U.S. JURISDICTION

- Work with staff to build ETL pipeline for administrative data from medium sized southern prosecutor's office
- Find that prosecutors use discretion to reduce racial disparities
- Prior criminal records drive majority of systemic bias against Black defendants
- Prosecutorial dismissals cause a decrease in the probability of future re-conviction equally for Black and white defendants
- Causal effect on future re-arrests exhibits heterogeneity by race
- Utilize high-quality survey data, ML methods, and GIS to show policing exposes Black individuals to more contact with criminal justice system

Working papers

De-prosecution and death: A comment on the fatal flaws in Hogan (2022)
co-authored with Jacob Kaplan and Tom Scott

- Replicate and critique of De-prosecution and death: A synthetic control analysis of the impact of de-prosecution on homicides by Thomas Hogan in Criminology & Public Policy

It's always sunny in politics
co-authored with Carolina Concha-Arriagada

- Create novel data that include net shortwave radiation (sunshine accounting for atmosphere), precipitation, and voting behavior at the county level for 1948-2016.
- Find empirical evidence that voter's are more willing to choose riskier candidates when exposed to more sunshine
- Develop parsimonious model that organizes empirical results and implies additional empirical tests

Using rain for electoral gain: Evidence from FEMA's Public Assistance Program

- Construct novel dataset by processing precinct level election results and pixel level weather data using GIS methods
- Find empirical support for model in which political competition distorts public funds

Works in progress

Do peers influence accumulation of criminal human capital in jail?

- Use random cell assignment of individuals detained in jail to measure how exposure to different types of cellmates impacts future criminal activity

Impact of screening on early dismissals

- Leverage variation generated by pilot screening unit in medium sized southern jurisdiction
- Find screening increases early dismissal rates for Black defendants, while not impacting rates for White defendants

Ranking crime types using combinatorial Hodge theory and survey data
joint work with Kevin Himberger

- Survey approximately 30 assistant prosecutors in medium sized jurisdiction regarding prioritization of crime types
- Apply HodgeRank to get back global consistent ranking
- Build python package rankpy to implement HodgeRank

Unionization, labor market power, and wage inequality
joint work with Laurent Bouton, Ben Solow, and Lee Tucker

- Harmonize 30 years of NLRB election data across multiple sources

Publications

Duffy, S., Naddeo, J., Owens, D. M., and Smith, J. (2021). Cognitive load and mixed strategies: On brains and minimax

Tomko, J. A., Jimenez, R., Naddeo, J., Bubb, D. M., and O'Malley, S. M. (2018). Effects of laser polarization and linear surface features on nanoparticle synthesis during laser ablation in liquids. Laser Physics, 28(3)

Tomko, J., O'Malley, S. M., Trout, C., Naddeo, J. J., Jimenez, R., Griepenburg, J. C., Soliman, W., and Bubb, D. M. (2017). Cavitation bubble dynamics and nanoparticle size distributions in laser ablation in liquids. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 522:368–372

Ratti, M., Naddeo, J. J., Tan, Y., Griepenburg, J. C., Tomko, J., Trout, C., O'Malley, S. M., Bubb, D. M., and Klein, E. A. (2016). Irradiation with visible light enhances the antibacterial toxicity of silver nanoparticles produced by laser ablation. Applied Physics A: Materials Science and Processing, 122(4)

Naddeo, J. J., Ratti, M., O'Malley, S. M., Griepenburg, J. C., Bubb, D. M., and Klein, E. A. (2015). Antibacterial Properties of Nanoparticles: A Comparative Review of Chemically Synthesized and Laser-Generated Particles. Advanced Science, Engineering and Medicine, 7(12):1044–1057

Yamada, T., Chen, C. C., Naddeo, J. J., and Harris, J. R. (2015). Changing Healthcare Policies: Implications for Income, Education, and Health Disparity. Frontiers in Public Health, 3(August):3–6

Amin, M., Tomko, J., Naddeo, J. J., Jimenez, R., Bubb, D. M., Steiner, M., Fitz-Gerald, J., and O'Malley, S. M. (2015). Laser-assisted synthesis of ultra-small anatase TiO 2 nanoparticles. Applied Surface Science, 348:30–37

Tomko, J., Naddeo, J. J., Jimenez, R., Tan, Y., Steiner, M., Fitz-Gerald, J. M., Bubb, D. M., and O'Malley, S. M. (2015). Size and polydispersity trends found in gold nanoparticles synthesized by laser ablation in liquids. Physical Chemistry Chemical Physics, 17(25):16327–16333

Naddeo, J. J. and Bubb, D. M. (2015). Encyclopedia of Nanotechnology. In Encyclopedia of Nanotechnology, pages 1–6

O'Malley, S. M., Zinderman, B., Schoeffling, J., Jimenez, R., Naddeo, J. J., and Bubb, D. M. (2014). Nanosecond laser-induced shock propagation in and above organic liquid and solid targets. Chemical Physics Letters, 615:30–34

Presentations

Southern Economic Association Annual Meeting

Nov 2021
Houston, TX

Using Rain for Electoral Gain: Evidence from FEMA's Public Assistance Program

Midwest Economic Association Annual Meeting [Cancelled-COVID-19]

Mar 2020
Chicago, IL

Using Rain for Electoral Gain: Evidence from FEMA's Public Assistance Program

Behavioral and Experimental Economists of the Mid-Atlantic

Oct 2019
Philadelphia, PA

Political Determinants of Public Spending at the State Level: Evidence from FEMA's Public Assistance Program

Conference on Laser Ablation

Aug 2015
Cairns, Australia

Influence of Cavitation Bubble Dynamics and Laser Fluence on Particle Size in Pulsed Laser Ablation in Liquids

CONFERENCE ON LASER ABLATION [POSTER]

Aug 2015
Cairns, Australia

Light Induced Toxicity of Silver Nanoparticles Produced by Laser Ablation

NJ SPACE GRANT CONSORTIUM SUMMER RESEARCH CONFERENCE

Aug 2015
New Brunswick, NJ

Light Induced Toxicity of Silver Nanoparticles Produced by Laser Ablation

GLOBAL HEALTH RESEARCH SYMPOSIUM [POSTER]

Jun 2015
New Brunswick, NJ

Light Induced Toxicity of Silver Nanoparticles Produced by Laser Ablation

SOCIETY OF PHYSICS STUDENTS ZONE 3 MEETING [POSTER]

Apr 2015
Newark, DE

Light Induced Toxicity of Silver Nanoparticles Produced by Laser Ablation

MICROBIOLOGY SYMPOSIUM [POSTER]

Jan 2015
New Brunswick, NJ

Light Induced Toxicity of Silver Nanoparticles Produced by Laser Ablation

CELEBRATION OF UNDERGRADUATE RESEARCH & CREATIVE ACTIVITY [POSTER]

May 2014
New Brunswick, NJ

A Study on the Formation of Bimetallic Nanoparticles Using Pulsed Laser Ablation in Liquids

CELEBRATION OF UNDERGRADUATE RESEARCH & CREATIVE ACTIVITY [POSTER]

May 2014
New Brunswick, NJ

Antimicrobial Effects of Metal Nanoparticles

SKILLS

PROGRAMMING LANGUAGE **Experienced:** Stata | Python **Familiar:** R | Julia | Matlab

FRAMEWORKS & TOOLS Git | ArcGIS | Qualtrics | Jupyter | VSCode | Mendeley | LaTeX

References

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