

Nitheesha Nakka

Email: nitheesha.nakka@princeton.edu | Personal Webpage: <https://nitheeshan.github.io/>
GitHub: <https://github.com/NitheeshaN>

Education

The Pennsylvania State University, University Park, PA
Ph.D. Political Science and Social Data Analytics December 2025
M.A. Political Science May 2022

Stony Brook University, Stony Brook, NY
M.A. Sociology August 2020

University of Connecticut, Storrs, CT
B.A. Honors in Economics, Minor: French May 2016
Dean's List, New England Scholar, Cum Laude, Alpha Lambda Delta

Skills & Background

Methods: Natural Language Processing; Big Data Analytics; Machine Learning; Large Language Modelling; Network Analysis; Causal Inference; Time Series Analysis

Programming: R, Python, SQL, LaTeX

Spoken Languages: Telugu (fluent speaking ability), French (proficient reading and speaking ability)

Work Experience

Princeton University Niehaus Center Globalization and Governance October 2025 – Present
Data Science Specialist

- Advise Faculty, Research Fellows, and Graduate students on research design and methodology, delivering training in computational social science techniques including LLMs, machine learning, and causal inference
- Architected the Sovereign Finance Lab's sovereign bond and financial database, establishing a comprehensive codebook, data management framework, and quality assurance processes to ensure long-term integrity and usability

RAND Corporation

Research Associate May 2024 – January 2025

- Conducted research on cybersecurity risks of AI malpractice for the US Department of Defense Cyber Command
- Developed and presented actionable partnership strategies between Cyber Command, private sector firms, and non-governmental organizations to an audience of over 40 attendees, including DoD representatives and senior RAND researchers

School of Medicine at Stony Brook University

Administrative Assistant May 2018-September 2019

- Managed data collection and system organization of all medical school applications for admissions Office ensuring data accuracy via detailed documentation and validation checks

University of Connecticut

Student Activities Event Coordinator August 2016-June 2017

- Arranged weekly art exhibits and campus wide events bolstering student engagement
- Coordinated school-wide student government elections alongside advising student leaders

Asian American Cultural Center (AsACC) Pan Asian Council

Member

January 2014-April 2015

Coordinator

April 2015-May 2016

- Coordinated all members and student organizations within AsACC to host school-wide cultural programming, conferences and charitable events that reinforce and educate Asian American initiatives including raising over \$3,400 for AsACC programming via crowdfunding

Publications

Nakka, Nitheesha, “An Evaluation of the Google Perspective API by Race and Gender”, 2025.

Association of Computing Machinery Web Science Conference Proceedings

- Paper Link: <https://dl.acm.org/doi/10.1145/3717867.3717901>
- Presented at: Web Science Conference 2025

Nitheesha Nakka, Isaac Pollert, Lingyu Fuca, Tai, Yuehong Cassandra, 2025. “Navigating Hate Speech: Bridging LLMs and Human Expertise in Public Officials’ Online Communication”, *ICWSM Cyber Social Threats Conference Proceedings*

- Paper Link: https://workshop-proceedings.icwsm.org/abstract.php?id=2025_11
- Presented at: ICWSM Cyber Social Threats Workshop 2025

Tai, Yuehong Cassandra, **Nitheesha Nakka**, Khushi Navin Patni, Sarah Michele Rajtmajer, Kevin Munger, Yu-Ru Lin, Bruce A. Desmarais, 2025. “The Digitally Accountable Public Representation Database: Measuring Online Communication by Federal, State, and Local Officials”, *Nature Scientific Data*

- Paper Link: <https://www.nature.com/articles/s41597-025-05857-1>
- Presented at: SPPC 2024

Ishita Gopal, Taegyoon Kim, **Nitheesha Nakka**, Fred J Boehmke , Jeff J Harden , Bruce A Desmarais . “The national network of US state legislators on Twitter”, 2024. *Political Science Research and Methods*. Published online: 1-13.

- Paper Link: <https://doi.org/10.1017/psrm.2024.52>

Kim, Taegyoon, **Nitheesha Nakka**, Ishita Gopal, Bruce Desmarais, Abigail Mancinelli, Jeff Harden, Hyein Ko, Fred Boehmke, 2022. “Attention to the COVID-19 pandemic on Twitter: Partisan differences among U.S. state legislators.” *Legislative Studies Quarterly*. 47(4).

- Paper Link: <https://onlinelibrary.wiley.com/doi/full/10.1111/lsq.12367>

Working Papers

Nitheesha Nakka, Saksham Ranjan, Sai Koneru, Olivia Kuester, Emily Anderson, Sarah Rajtmajer, Jeffrey J. Harden, Frederick Boehmke “AI-Assisted Evidence Linking: A Strategy to Improve Research Use in Polarized K-12 Education Policymaking”

- Paper Link: Forthcoming
- Presenting at: American Political Science Association Conference (APSA) 2026

Nitheesha Nakka, “The Racial and Gender Divide in Toxic Online Messaging Towards Politicians”

- Paper Link: <https://osf.io/md9f8/>
- Presented at: Institute of Computational Data Science (ICDS) Symposium 2021, Political Networks (PolNet) Conference 2021, Midwest Political Science Association Conference 2022

Nitheesha Nakka, “Racial and Gender Biases in State Legislators Twitter Endorsements: A Network Analysis” (Dissertation Chapter)

- Paper Link: <https://osf.io/rg9s4/>
- Presented at: Political Methodology Conference 2023, State Politics and Policy Conference (SPPC) 2024, APSA 2024, Political Networks 2025

Nakka, Nitheesha, Ömer F. Yalçın, Bruce Desmarais, Sarah Rajtmajer, Burt Monroe, “The study of short texts in digital politics: Document aggregation for topic modeling” (Revised and Resubmitted)

- Paper Link: <https://arxiv.org/abs/2503.05065>
- Presented at: PolNet 2022, ICDS Symposium 2022

Tai, Yuehong Cassandra, Isaac Pollert, **Nitheesha Nakka**, Lingyu Fuca, “Understanding Asian Hate in State Legislatures: An Electoral Connection”

- Paper Link: <https://osf.io/y94tm/>
- Presented at: APSA 2024, SPSA 2025

Pablo Barberá, Amber Boydston, Suzanna Linn, Ryan McMahon, Jonathan Nagler, **Nitheesha Nakka**, “Economic Conditions, Economic Perceptions, and Media Coverage of the United States Economy”

- Paper Link: Forthcoming

Peer Reviewer

Association of Computing Machinery Web Science 2023, 2024, 2025, 2026

Journal of Election Administration, Research & Practice 2025

Journal of Information Technology and Politics 2024, 2025

Journal of Quantitative Description: Digital Media 2024

Association of Computing Machinery KDD 2024

History of Political Economy 2024

Political Analysis Journal 2023

Research Experience

Pennsylvania State University

Dr. Bruce Desmarais

August 2020-Present

- AI in Policymaking: CA Case Study
 - o Developed web-scraping script in Python to collect press release text from CA legislators
- Digitally Accountable Public Representation (DAPR) project
 - o Developed web-scraping tools in Python to compile a comprehensive dataset of American public officials’ social media accounts
 - o Aided in constructing a big-data pipeline of public officials’ social media posts across multiple platforms and years
 - o Utilized SQL to extract and transform large data sets of public official’s social media data. demographic data and electoral data from relational databases
 - o Implemented rigorous validation checks via R to ensure data accuracy, integrity and completeness
- Descriptive Analyses of Online Digital Discourse
 - o Implemented machine learning models in Python and R to identify political ideology in tweet text data
 - o Applied linear and logistic regression techniques to reveal patterns in online harassment
- Computational Topic Model Analysis

- Created structural topic models of United State legislators X posts using a high-performance computing system to identify model considerations when doing large-scale text analysis
- Legislative Covid19 Related Discourse
 - Created data visualizations in R that distinguish partisan discussion of the Covid-19 pandemic amongst United States Legislators on social media
- General Research Tasks
 - Presented research to technical and non-technical audiences at 11 conferences and 2 guest lectures
 - Supervised teams of undergraduate and graduate research assistants by delegating tasks, mentoring students and debugging code
 - Assembled a comprehensive dataset of all United States legislators' demographic characteristics including hand-coded race and gender variables

Dr. Suzanna Linn January 2021-Present
 - Conducted a time series analysis to identify how objective economic indicators drive content of economic media coverage and presented results with meaningful figures

Dr. Bruce Desmarais & Dr. Kevin Munger May 2021-August 2021
 - Utilized the YouTube API to collect and analyze audio and text data of state legislative sessions

Stony Brook University

Dr. Rebekah Burroway September 2018-May 2020
 - Conducted a cross-national analysis that measures the effects of women's financial independence on child health outcomes using STATA

Dr. Kathleen Fallon September 2018-July 2020
 - Compiled a dataset of 80 years of USAID policy documentation to determine differences in American foreign and domestic aid initiatives

Teaching Experience

Pennsylvania State University

Workshop Presenter

Introduction to High Performance Computing Use in Academic Research April 2023
Introduction to ROAR Collab: Interactive Jupyter and RStudio Sessions March 2024

Pennsylvania State University

Teaching Assistant

Analyzing the American Presidency: Data Analysis with R August 2022-December 2022

Stony Brook University

Course Instructor

Historical and Contemporary Sociological Theory May 2020-July 2020

Teaching Assistant

Historical Development of Sociological Theory August 2017-December 2017
August 2018-December 2018
August 2019-December 2019
 Gender and Reproduction January 2018-May 2018
 Research Methods January 2019-May 2019
 Media and Society January 2020-May 2020

Additional Presentations

University of Pittsburgh

State Politics and Policy Conference

Poster Presentation

May 2023

“High Profile Minority Politicians and the Emergence of Minority State Legislators: A Pilot Study”

Pennsylvania State University

CAPR Conference

Poster Presentation

March 2023

“High Profile Minority Politicians and the Emergence of Minority State Legislators: A Pilot Study”

University of Connecticut

Identifying the Missing Power of Asian American in CT Leadership Conference

Workshop Presenter

November 2016

“Discussion vs. Debate: Media Coverage on the 2016 Presidential Election”

Panelist

Panel to mentor undergraduate students on job and graduate school search

Workshop Presenter

November 2014

“Asian Female Representation in the Media”

Grants and Awards

Pennsylvania State University

Graduate Alliance for Diversity and Inclusion Research Award

Awarded May 2025

- \$250 research award funding

Department of Political Science: Outstanding Graduate Student Award

Awarded June 2024

- This award recognizes graduate students for their research and extracurricular contributions to the Political Science field and provides \$1000 in research funding.

Department of Political Science: Paterno Graduate Fellowship

Awarded April 2024

Department of Political Science: CAPR Graduate Fellowship

Awarded April 2024

- CAPR and Paterno Fellows are recognized for their academic performance and exceptional promise within their program.

Department of Political Science: Summer Graduate Research Award

Awarded May 2021/23/25

- \$4000 funding to support co-authored research

Center for Social Data Analytics Pre- Doctoral Fellow 2023-2024

Awarded April 2023

McCourtney Institute of Democracy

Awarded April 2023

- \$1,000 funding to support dissertation research

Center for Social Data Analytics

Awarded April 2023

- \$3,800 funding to support dissertation research

Department of Political Science: Research Grant

Awarded March 2023

- \$2,000 funding to support dissertation research

Department of Political Science: CAPR Political Science Fellowship

Awarded March 2022

Institute of Computational Data Science Scholar

Awarded July 2020

- \$2000 funding to support graduate students pursuing interdisciplinary computational research

National Science Foundation Fellowship

Political Methodology Conference

Awarded June 2023

- \$1,650 Travel Grant

**Tom Carsey Graduate Student Award
State Politics and Policy Conference**

Awarded May 2023 and June 2024

- \$300 Travel Grant

University of Connecticut

Rockwood Q. P. Chin Scholarship

Awarded April 2015

- \$400 award given to an outstanding junior or senior economics major who has demonstrated a special interest and ability in the field of international economics

Asian American Cultural Center (AsACC) Endowment Fund

Awarded May 2013

- \$1000 four-year renewable scholarship given to undergraduates who are actively involved with AsACC programs, including leadership in Asian American student organizations, and involvement in an Asian American initiative, research project or community cause within Connecticut

References

Bruce Desmarais

Professor of Political Science and Social Data Analytics
Pennsylvania State University
bdesmarais@psu.edu

Sarah Rajtmajer

Assistant Professor of Information Sciences and Technology
Pennsylvania State University
Smr46@psu.edu

Ray Block

Associate Professor of Political Science and African American Studies
Pennsylvania State University
Rjb6233@psu.edu

Kyleanne Hunter

RAND Corporation
Director, RAND Women, Peace, and Security Initiative; Senior Political Scientist; Professor of Policy Analysis, Pardee RAND Graduate School
khunter@rand.org

Suzanna Linn

Distinguished Professor of Political Science
Pennsylvania State University
sld8@psu.edu

Joslyn Fleming

RAND Corporation
Defense Policy Researcher; Professor of Policy Analysis, Pardee RAND Graduate School
Joslyn_Fleming@rand.org