APARNA ANANTHASUBRAMANIAM

Ph.D. Student

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EDUCATION

University of Michigan

2019 – present

- Ph.D., School of Information (advisor: Daniel Romero)
- Ph.D., School of Social Work (advisor: Kristin Seefeldt)
- M.S.W., School of Social Work

Stanford University

2014

- M.S., Management Science & Engineering, concentration: Operations and Analytics
- B.S., Mathematics

PEER-REVIEWED PUBLICATIONS

* denotes equal contributions, † denotes lead analyst (non-first-author, led execution and writing of the paper)

Socioeconomic Shocks, Macro Context, and Mental Health:

- [1] Mezuk B, Kalesnikava VA*†, **Ananthasubramaniam A***†, Lane A, Rodriguez-Putnam A, Johns L, Bagge C, Burgard S, Zivin K. (2024) "Suicide in the US during the First Year of the Pandemic: Evidence from the National Violent Death Reporting System." *PLoS One*. 19 (10), e0312027.
- [2] **Ananthasubramaniam A**, Jurgens D, Kahsay E, Mezuk B. (2024) "Retirement-Related Suicide during the Great Recession: Perspectives from the National Violent Death Reporting System." *The Gerontologist* 64(6).
- [3] Dang L*, **Ananthasubramaniam A***, Mezuk B. (2022) "Spotlight on the Prevalence and Challenges of Depression following Retirement: Opportunities for interventions." *Clinical Interventions in Aging*, 1037-1056.
- [4] **Ananthasubramaniam A**, Thulin E, Falde S, Kertawidjaja J, Kalesnikava V, Johns L, Rodriguez-Putnam A, Spring E, Zivin K, Mezuk B. (2025) "Characterizing Online Activities Contributing to Suicide Mortality Among Youth." *under review*.
 - **Third place** (top ~10%) in the CDC Youth Mental Health: Novel Variables Data Challenge
- [5] Zhong C, Danh L, **Ananthasubramaniam A**[†], Mezuk B. (2024) "Understanding the Links between Social Isolation and Functional Limitations: A Network Analysis." *under review*.

Social Networks and Social Influence:

- [6] **Ananthasubramaniam A**, Zhu Y, Jurgens D, Romero D. (2025) "The Role of Network and Identity in the Diffusion of Hashtags." *Proceedings of the Web Conference (WWW)*. accepted.
- [7] Xu N*, Chen H*, Rakshit S*, **Ananthasubramaniam A***, Yada O*, Zheng M*, Jiang M*, Zhang L*, Yi B*, Alkeik K*, Israeli A*, Shu B*, Shen H*, Pei J*, Zhang H*, Jurgens D.

- (random order of first authors) (2025) "When Reply-All Becomes Reply-None: Modeling Intent, Expectation, and Responsiveness in an Email Conversation." *Proceedings of the 2025 Annual Conference of the North American Chapter of the Association for Computational Linguistics (NAACL)*. accepted.
- [8] **Ananthasubramaniam A**, Jurgens D, Romero D. (2024) "Networks and Identity Drive Geographical Properties of the Diffusion of Linguistic Innovation." *npj Complexity (Nature Portfolio Journal)*, 1(14).
- [9] Ivey J*, Kumar S*, Liu J*, Shen H*, Rakshit S*, Raju R*, Zhang H*, **Ananthasubramaniam A***, Kim J*, Yi B*, Wright D*, Israeli A*, Møller AG*, Zhang L*, Jurgens D. (random order of first authors) (2024) "Real or Robotic? Assessing Whether LLMs Accurately Simulate Qualities of Human Responses in Dialogue." *under review*.

Misc:

- [10] Pei J, Ananthasubramaniam A, Wang X, Zhou N, Sargent J, Jurgens D. (2022) "Potato: The Portable Annotation Tool." Proceedings of the 2022 Conference on Empirical Methods in Natural Language Processing: System Demonstrations.
- [11] Diniz Behn C, **Ananthasubramaniam A**[†], Booth V. (2013) "Contrasting existence and robustness of REM/NREM cycling in physiologically-based models of regulatory networks." *SIAM Journal of Applied Dynamical Systems*, 12(1), 279–314

WORKSHOPS PAPERS (ARCHIVAL, LIGHTLY REVIEWED):

[12] **Ananthasubramaniam** A*, Chen H*, Yan J*, Alkeik K*, Pei J*, Seth A*, Dunagan L*, Choi M*, Litterer B*, Jurgens D. (random order of first authors) (2023) "Exploring Linguistic Style Matching in Online Communities: The Role of Social Context and Conversation Dynamics." *Proceedings of the First Workshop on Social Influence in Conversations (SICon 2023)*, 64–74, Toronto, Canada. Association for Computational Linguistics. **Best Paper Award**

CONFERENCE PRESENTATIONS AND INVITED TALKS (NON-ARCHIVAL):

Ananthasubramaniam A, Jurgens D, Romero D. The Role of Networks and Identity in the Diffusion of Hashtags on Twitter. Presented at:

• International Conference on Computational Social Science (2024, oral)

Ananthasubramaniam A, Jurgens D, Romero D, Mezuk B. Macroeconomic Contexts Moderate Suicide Risk Associated with Socioeconomic Shocks. Presented at:

- Michigan Language and Speech Days (2024, poster)
- International Conference on Computational Social Science (2024, poster)

Ananthasubramaniam A, Jurgens D, Romero D, Mezuk B. State Housing Protections Moderate the Risk of Suicide Mortality following Eviction and Foreclosure. Presented at:

• Michigan Institute for Clinical and Health Research IDEAL Symposium (2024, poster)

Ananthasubramaniam A, Jurgens D, Kahsay E, Mezuk B. Retirement Transitions and Completed Suicide During Recovery from the Great Recession: Evidence from the NVDRS. Presented at:

- National Violent Death Reporting System Conference (2023, oral)
- Gerontological Society of America Annual Scientific Meeting (2022, oral by BM)

Zhong C, Dang L, **Ananthasubramaniam A**, Mezuk B. Network Analysis of Objective and Subjective Indicators of Social Isolation and Functional Limitations. Presented at:

• Gerontological Society of America Annual Scientific Meeting (2023, oral by CZ)

Ananthasubramaniam A, Jurgens, D, Romero, D. Networks and Identity Drive the Diffusion of New Words and Hashtags on Twitter. Presented at:

- Contagion on Complex Social Systems Workshop (2023, oral)
- International Conference on Computational Social Science (2022, poster)
- Data Science / Computational Social Science Seminar, University of Michigan School of Information (2022, oral)
- International Conference on Computational Social Science (2020, oral)

Ananthasubramaniam, A. Modeling Tradeoffs of Security Risks in Telemetric Cardiac Pacemakers. Presented at:

• International Conference on Computational Social Science (2020, poster)

Ananthasubramaniam, A, Basu S. Agent-Based Modeling Workshop.

• Active Living Research Conference (2014, oral)

Ananthasubramaniam A, Diniz Behn C, Booth V. The Dynamics of REM Sleep Generation.

• Northern California Undergraduate Mathematics Conference (2011, oral)

TEACHING

University of Michigan Teaching

SI 301: Models of Social Information Processing (Lead Graduate Student Instructor), Fall 2024

SI 301: Models of Social Information Processing (Lead Graduate Student Instructor), Fall 2023

SI 301: Models of Social Information Processing (Graduate Student Instructor), Fall 2022

SI 544: Introduction to Statistics and Data Analysis (Graduate Student Instructor), Fall 2021

University of Michigan Guest Lectures

"Bayes' Theorem" for SI 301: Models of Social Information Processing, Fall 2023

"Logistic Regression and Regression Discontinuity," SI 330: Data Manipulation, Winter 2023

"Information Retrieval Applications" for SI 650: Information Retrieval, Fall 2022

"Structural Balance Theorem," SI 301: Models of Social Information Processing, Fall 2022

"Causal Inference," SI 544: Introduction to Statistics and Data Analysis, Fall 2021

[&]quot;Spatial Data Analysis," SI 330: Data Manipulation, Winter 2023

Stanford University Teaching

Phil 197I: Homelessness in Silicon Valley (Course Creator and Instructor), Winter 2015 - 2018 Math 19-21: Single Variable Calculus (Undergrad. Teaching Assistant), AY 2011, 2013 – 2014 Peds 299: Implementing Behavior Change Interventions (Student-Led Course, Creator and Instructor), Winter 2013

EarthSys 18: Designing Behavior Change Interventions (Student-Led Course, Instructor), Fall 2011 – 2013

AWARDS

UMSI Outstanding Graduate Student Instructor of the Year Award, 2023 and 2024 (given to one PhD student each year; also nominated in 2022)

UMSI Team Award for Impact in Diversity, Equity, & Inclusion, 2022 (for organizing the Race and Technology Reading Group; given to one PhD student initiative each year)
US Presidential Scholar, US Dept of Education, 2009 (selected as one of two scholars from the state of Michigan)

ACADEMIC SERVICE

At School of Information, University of Michigan:

Founder / **Co-Organizer**, Computational Social Science Working Group Win 2023 – Sum 2024 Cross-disciplinary space, for researchers studying social questions using computational methods. Built a mailing list of over 200 graduate students, research staff, and faculty from nearly 20 departments. Held biweekly working group meetings for research presentations (~15-20 attendees from 2-4 departments each meeting) and semesterly mixers for networking (~55-65 attendees from 10+ departments each event). Managed annual budget of \$1500.

Co-Organizer, *Race and Technology Reading Group*Fall 2020 – Sum 2023 Held weekly meetings to discuss books about race and racism in technology (~5-10 attendees). Developed antiracist facilitation materials that allowed participants to share lived experience in academic discussions. Invited 3 faculty members to discuss their books with the group. Managed \$3000 annual budget and mailing list of over 250 people.

Member, Committee on Doctoral Student Workspace Allocations Win 2020, 2021, 2025 Worked with Academic Dean and Doctoral Executive Committee to determine how to assign limited departmental workspaces to PhD students. Authored and analyzed a survey (81% response rate) to develop principles for allocation in a member-engaged way. Supported the implementation of the new allocation system, which remained in use by department administration until the school moved to a larger building.

FINANCIAL SERVICES WORK EXPERIENCE

Researcher (Contract/Volunteer), Mission Asset Fund, San Francisco, CA 2020 – present Currently consulting on design of and lead analyst for a 2-year evaluation of a Guaranteed Income program. Developed a "Financial Equity Framework" to prioritize the waitlist of a \$25M Rapid Response Fund, giving cash assistance grants to college students, Los Angeles Creative Economy workers, and undocumented immigrants left out of CARES Act funding. Launched three bilingual surveys to measure financial impacts of COVID-19 for grant recipients' and their financial coping strategies. Developed data-driven insights to policymakers, including in CA's State Legislature. Developed models to capture financial wellbeing of low-income immigrants.

Research Director, Mission Asset Fund, San Francisco, CA	2018 - 2019
Research & Development Director	2016 - 2018
Research & Development Manager	2015 - 2016
Product & Research Fellow	2014 - 2015

Managed a fintech nonprofit's research and technology work, including supervising a team of up to 3 people and 4 remote engineers. Developed operations plans and data systems for many business-critical processes, including loan management, accounting, and underwriting and application review. Authored a survey to measure impact and help stakeholders understand our clients' financial lives. Conducted user research via interviews, focus groups, surveys, and analysis of client credit reports to inform the design of technology and help tell a nuanced, strengths-based story about the financial wellbeing of low-income and immigrant communities in USA. Developed research insights presentations on entrepreneurship, informal income, credit tradelines, and ITIN services for funders and policymakers.

HOMELESS SERVICES WORK EXPERIENCE

ACT Team Intern, County Mental Health, Ypsilanti, MI

2025 – present

Conducted MSW fieldwork on the county's Assertive Community Treatment (ACT) team, providing treatment plan monitoring and intensive case management to individuals with serious mental illness.

Founding Shelter Director, Overnight Warming Location, Palo Alto, CA 2023 – present Partnered with the City of Palo Alto, Palo Alto Library, and Heart and Home Collaborative (see below) to open the first and only warming center in the northern part of Silicon Valley, in response to an increase in hypothermia deaths in the area. Developed operations manuals, policies, and staff training materials. Recruited, trained, and managed shelter staff. Managed community outreach to referral partners. Created and oversaw all ancillary services (e.g., laundry, meals, resource sharing, outreach).

Board of Directors, Heart and Home Collaborative, Palo Alto, CA

2016 – 19, 2022 – present
Shelter Director and Client Services Director

Representative, Santa Clara County Homeless Service Providers' Collaborative
2014 – 15
Trainee / Shelter Worker, LifeMoves Shelter Partnership

Co-Founder

2011 – present

Opened a volunteer-run shelter for unhoused women, using participatory planning methodologies to develop the shelter's operations manuals and policies. Served as one of two

Shelter Directors, overseeing staffing, client touchpoints (intake, discharge, conflicts, house meetings), and support services (housing and job search, medical needs, sympathetic ear). Helped recruit three faith organizations to house the shelter. Supported key operational functions including community outreach, supplies management, finances, reporting, and street outreach.

Case Manager/Crisis Manager, Neighbors Helping Neighbors, Palo Alto, CA 2014 – 16 Assessed needs, created action plans, helped clients navigate resources and medical/financial systems, and offered other support to low- and middle-income adults in Silicon Valley, as (unpaid) staff in a volunteer-run organization. Worked with clients with higher levels of need and who required ongoing support, including those with serious, often co-occurring housing, financial, medical, and mental health challenges.

Data Analyst, *Community Technology Alliance*, *San Jose*, *CA*2012 – 13 Supported five Bay Area counties in understanding their homeless residents' demographics, housing status, service use, and program successes. Collaborated on two county-wide initiatives on reducing chronic homelessness and implementing a rapid re-housing program, including understanding and forecasting retention in housing and monitoring and evaluating early results.

Co-Founder and Member, *Community Cooperation Team*, *Palo Alto*, *CA* 2011-13 Started a community-led organizing group, which successfully petitioned Palo Alto's City Council to overturn a proposed vehicle habitation ban in 2012, and continued to advocate for local policy affected the unhoused community through 2015.