APARNA ANANTHASUBRAMANIAM

Ph.D. Candidate

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EDUCATION

University of Michigan

2019 – present

- Ph.D., School of Information
- Advisors: Daniel Romero and David Jurgens

Stanford University

2014

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

PEER-REVIEWED PUBLICATIONS

* denotes equal contributions, † denotes lead analyst (non-first-author)

Under Review:

- [1] **Ananthasubramaniam A**, Jurgens D, Romero D. (2021) "Networks and Identity Drive Geographical Properties of the Diffusion of Linguistic Innovation." *under R&R at Nature Complexity*.
- [2] **Ananthasubramaniam A**, Zhu Y, Jurgens D, Romero D. (2023) "The Role of Network and Identity in the Diffusion of Hashtags." *submitted*
- [3] Zhong C, Danh L, **Ananthasubramaniam A**[†], Mezuk B. (2024) "Understanding the Links between Social Isolation and Functional Limitations: A Network Analysis." *submitted*
- [4] Mezuk B, Kalesnikava VA*[†], **Ananthasubramaniam A***[†], Johns L, Rodriguez-Putnam A, Lane A, Bagge C, Burgard S, Zivin K. (2023) "Suicide in the US during the First Year of the Pandemic: Evidence from the National Violent Death Reporting System." *submitted*

Published:

- [5] **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*, accepted.
- [6] **Ananthasubramaniam A***, Chen H*, Yan J*, Alkeik K*, Pei J*, Seth A*, Dunagan L*, Choi M*, Litterer B*, Jurgens D. (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)*, pages 64–74, Toronto, Canada. Association for Computational Linguistics.

Best Paper Award

[7] Dang L*, **Ananthasubramaniam A***, Mezuk B. (2022) "Spotlight on the Prevalence and Challenges of Depression following Retirement: Opportunities for interventions." *Clinical Interventions in Aging*, pages 1037-1056.

- [8] 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*.
- [9] 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

CONFERENCE PRESENTATIONS (NON-ARCHIVAL)

- [1] Zhong C, Dang L, **Ananthasubramaniam A**, Mezuk B. (2023) Network Analysis of Objective and Subjective Indicators of Social Isolation and Functional Limitations. *2023 Gerontological Society of America Annual Scientific Meeting*.
- [2] **Ananthasubramaniam A**, Jurgens, D, Romero, D. (2023) Social Properties and the Diffusion of New Words and Hashtags on Twitter. *Contagion on Complex Social Systems Workshop*.
- [3] **Ananthasubramaniam A**, Jurgens D, Mezuk B. (2023) Retirement Transitions and Completed Suicide During Recovery from the Great Recession: Evidence from the NVDRS. 2023 National Violent Death Reporting System Conference.
- [4] Mezuk B, Ananthasubramaniam A, Dang L, Jurgens D. (2022) Retirement Transitions and Completed Suicide During Recovery from the Great Recession: Evidence from the NVDRS. 2022 Gerontological Society of America Annual Scientific Meeting.
- [5] **Ananthasubramaniam A**, Jurgens, D, Romero, D. (2022) Networks and Identity Drive Geographical Properties of the Diffusion of Linguistic Innovation. *International Conference on Computational Social Science*.
- [6] **Ananthasubramaniam A**, Jurgens, D, Romero, D. (2020) Modeling the Geographic Diffusion of Lexical Innovation on Twitter. *International Conference on Computational Social Science*.
- [7] **Ananthasubramaniam**, **A**. (2020) Modeling Tradeoffs of Security Risks in Telemetric Cardiac Pacemakers. *International Conference on Computational Social Science*.
- [8] **Ananthasubramaniam**, **A**, Basu S. (2014) Agent-Based Modeling Workshop. *Active Living Research Conference*.
- [9] **Ananthasubramaniam A**, Diniz Behn C, Booth V. (2011) The Dynamics of REM Sleep Generation. *Northern California Undergraduate Mathematics Conference*.

TEACHING

University of Michigan

SI 301: Models of Social Information Processing (Lead Graduate Teaching Assistant), Fall 2023

SI 301: Models of Social Information Processing (Graduate Teaching Assistant), Fall 2022

SI 544: Introduction to Statistics and Data Analysis (Graduate Teaching Assistant), Fall 2021

Stanford University

Phil 197I: Homelessness in Silicon Valley (Student-Led Course, Creator/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

ACADEMIC SERVICE

At School of Information, University of Michigan:

Founder / Co-Organizer, Computational Social Science Working Group, Winter 2023 – present Co-Organizer, Race and Technology Reading Group, Fall 2020 – Summer 2023 Member, Committee on Doctoral Student Workspace Allocations, Winter 2020 & Winter 2021

INDUSTRY

Researcher (Contract/Volunteer), Mission Asset Fund, San Francisco, CA 2020 – present 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. Consulted on design of and lead analyst for a 2-year evaluation of a Guaranteed Income program.

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. 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.

Founding Program 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. Created and oversaw all ancillary services (e.g., laundry, meals, resource sharing, outreach).

Board of Directors, Heart and Home Collaborative, Palo Alto, CA 2016 – 2019, 2022 – present Co-Founder and Operations Team

Shelter Director and Client Services and Outreach Lead

Representative, Santa Clara County Homeless Service Providers' Collaborative 2014 – 2015

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/Crisis Manager, Neighbors Helping Neighbors, Palo Alto, CA

2014 – 2016
Assessed needs, created action plans, navigated resources, and offered other support to low- and middle-income adults in the South Bay Area, as volunteer 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*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 –2013 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.

HONORS

UMSI Outstanding Graduate Student Instructor of the Year Award, 2023 (given to one PhD student each year)

UMSI Team Award for Impact in Diversity, Equity, & Inclusion, 2022 (given to one PhD student-led group each year)

US Presidential Scholar, US Dept of Education, 2009 (selected as one of two scholars from the state of Michigan)