BRANDON L. KRAMER, PHD

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SUMMARY

PhD-level computational social scientist with 9+ years of experience conducting social, behavioral and policy research in team environments. Expertise in research design, data management, data analysis and modeling, data visualization, social network analysis and graph analytics. Background in experimental and survey design; working with administrative, geospatial and text data; supervised and unsupervised machine learning; and combining qualitative and quantitative methods to extract insights from unstructured data. Proficient in R, Python, SQL, SPSS, Stata, bash, Git, GitHub, Gephi, Looker/LookML, Tableau, NVIVO, Qualtrics, Excel, Word, PowerPoint, LaTeX, and working in high-performance computing environments. Strong communication, public speaking, writing, and project management skills.

PROFESSIONAL EXPERIENCE

Postdoctoral Researcher University of Virginia Biocomplexity Institute - Social and Decisions Analytics Division

2019-Present Arlington, VA

- Partnered with university, non-profit, and government stakeholders to develop, execute, and disseminate research projects on social, economic, and health-related issues
- Built data analysis and visualization pipelines in high-performance computing environment using R and Python
- Performed data extraction, transformation, and loading (ETL) of administrative, survey, and text data using PostgreSQL relational database to produce analysis-ready datasets for team members across multiple institutions
- Developed SQL queries to clean, manage, and summarize large-scale datasets for monthly reports to division director and project stakeholders
- Leveraged supervised text mining and unsupervised natural language processing strategies, including topic modeling and word embedding algorithms like Word2Vec and BERT to draw insights from text data
- Identified key influencers and change in large online platform using network analysis and node2vec
- Conducted descriptive and inferential statistical analyses, including clustering and regression, to examine historical trends and predict future risks for local, state, and federal policymakers
- Ran experiments and collected survey data to understand group decision-making and collective behavior during simulated social events on Amazon's Mechanical Turk (MTURK) platform
- Managed teams of graduate and undergraduate students to complete stakeholder-sponsored data science projects during 11-week Data Science for the Public Good Young Scholars program
- Created dashboards, websites, and online interactive visualizations using Rmarkdown, RShiny, and Gephi to tell compelling data-driven stories to non-technical audiences
- Wrote technical reports, whitepapers, and academic publications (Word, LaTex) in addition to delivering presentations (PowerPoint, LaTex) to communicate research findings to academic and government stakeholders
- Documented reproducible research and version control using Git, GitHub, RMarkdown, Jupyter Notebooks, and LaTeX to facilitate and improve collaboration across multi-institutional team setting

Doctoral Researcher Rutgers University - Department of Sociology

2012-2019

New Brunswick, NJ

- Conceptualized and executed mixed-method research projects that used quantitative and qualitative strategies to examine innovation and ethics in the biomedical and health sciences
- Published four manuscripts studying the impact of social inequalities and research ethics on health outcomes
- Recipient of multiple fellowships, awards, and academic honors for writing and research excellence
- Secured more than \$10,000 in additional research and travel funding
- Presented research to academic audiences at 10+ national and international conferences

2012-2019 New Brunswick, NJ

- Worked collaboratively with principal investigators, graduate, and undergraduate students on three different multidisciplinary teams conducting research on health-focused research projects
- Managed research laboratory collecting experimental, survey, biological, and interview data to study men's health
- Hired, supervised, and mentored 25 undergraduate students how to conduct literature reviews, run experiments, collect and store biological specimens, and clean complex cardiovascular data over four-year period
- Standardized protocols and procedures for experimental studies collecting sensitive biological data, including how participants were recruited, tracked, and informed of study's risks and benefits
- Programmed and disseminated surveys in Qualtrics as part of a multi-cohort longitudinal study
- Developed inferential statistical models to track political exchanges over time using AWS EC2 platform
- Performed multivariate analyses and visualized data in SPSS, Stata, and R statistical software environments
- Drafted, edited, and proofread manuscripts, abstracts, and posters for publication and conference presentations
- Ensured compliance with Institutional Review Board regulations

Graduate Instructor and Graduate Teaching Assistant Rutgers University, Department of Sociology

2015-2017 New Brunswick, NJ

- Designed and delivered lectures on sociology, health, and medicine to more than 150 students over two semesters
- Advised undergraduate students on research design and provided support with quantitative and qualitative analysis
- Evaluated and mentored students on academic progress and preparation for graduate and medical school
- Named to department honor roll for teaching effectiveness and the overall quality of instruction

EDUCATION

Ph.D. Sociology, Rutgers, The State University of New Jersey, New Brunswick, NJ	2014-19
M.A. Sociology, Rutgers, The State University of New Jersey, New Brunswick, NJ	2012-14
B.A. Sociology, University of Iowa, Iowa City, IA	2006-10

PROJECTS

- Kramer, B. L., Korkmaz, G., Calderón, J.B.S., Robbins, C. & Keller, S. "International Collaboration in Open-Source Software: A Longitudinal Network Analysis of GitHub." Link: https://github.com/uva-bi-sdad/oss-2020.
- Korkmaz, G., Robbins, C., Calderón, J.B.S., Kramer, B.L., Schroder, A., & Keller, S. "Measuring the Cost of Open-Source Software Innovation on GitHub." Link: https://github.com/uva-bi-sdad/oss-2020.
- Kramer, B. L. & Lee, C. "The Rise of Diversity and Population Terminology in Biomedical Research." Link: https://growthofdiversity.netlify.app/.
- Woteki, C. E., Kramer, B. L., Lancaster, V. & Cohen, S. (2020). "Impacts and Echoes: The Lasting Influence of the White House Conference on Food, Nutrition and Health." *Annual Review of Nutrition*, 40(1): 437-461. doi: https://doi.org/10.1146/annurev-nutr-121619-045319.
- Kramer, B. L. (2020). "The Molecularization of Race in Testosterone Research." *BioSocieties*. doi: https://doi.org/10.1057/s41292-020-00200-w.
- Kramer, B. L., Himmelstein, M. S., & Springer, K. W. (2017). "Getting to the Heart of Masculinity Stressors: Masculinity Threats Induce Pronounced Vagal Withdrawal During a Speaking Task." *Annals of Behavioral Medicine*, 51(6), 846-855. doi: https://doi.org/10.1007/s12160-017-9907-z.