

# WENDY K. TAM CHO

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## EDUCATION

- Ph.D. *Political Science*, University of California at Berkeley,  
Berkeley, California, 1997
- M.A. *Statistics*, University of California at Berkeley,  
Berkeley, California, 1997
- M.A. *Political Science*, University of California at Berkeley,  
Berkeley, California, 1992
- J.D. Program *Law*, Cornell University,  
Ithaca, New York, 1990–1991
- A.B. *Applied Mathematics* (applied field: *Computer Science*),  
University of California at Berkeley, Berkeley, California, 1990
- A.B. *Political Science*, University of California at Berkeley,  
Berkeley, California, 1990

## ACADEMIC APPOINTMENTS

### CURRENT

- Vanderbilt University
  - Professor, Department of Computer Science, 2024–
  - Professor, Department of Political Science, 2024–
  - Professor, Law School, 2024–
- University of California at San Francisco
  - Professional Researcher, School of Medicine, 2021–
- University of Illinois at Urbana-Champaign
  - Professor Emerita, 2024–
  - Affiliate, National Center for Supercomputing Applications, 2024–

### FORMER

- University of Illinois at Urbana-Champaign
  - Professor, Department of Political Science, 2010–2023
  - Professor, Department of Statistics, 2010–2023
  - Professor, Department of Mathematics, 2018–2023
  - Professor, Department of Computer Science, 2020–2023
  - Professor, Department of Asian American Studies, 2010–2023
  - Professor, College of Law, 2018–2023
  - Senior Research Scientist, National Center for Supercomputing Applications, 2006–2023
  - Faculty, Illinois Informatics Institute, Data Analytics and Information Visualization, 2010–2023
  - Affiliate, Computational Science and Engineering Program, 2010–2023
  - Affiliate, Cline Center for Advanced Social Research, 2007–2023
  - Affiliate, Program on Law, Behavior, and Social Science, College of Law, 2017–2023

**ACADEMIC APPOINTMENTS (cont.)****FORMER**

University of Illinois at Urbana-Champaign

Affiliate, CyberGIS Center for Advanced Digital and Spatial Studies, 2013–2018.

Associate Professor, Departments of Political Science, Statistics, and Asian American Studies, 2001–2005, 2006–2010

Assistant Professor, Departments of Political Science, 1997–2001, and Statistics, 1999–2001

Stanford University

Visiting Fellow, Hoover Institution, 2018–2021

Fellow, Center for Advanced Study in the Behavioral Sciences, 2019–2020

National Taiwan University

Visiting Professor, Department of Geography, 2021

Northwestern University

Associate Professor, Department of Political Science, 2005–2006

**PUBLICATIONS**

“Sociodemographic Disparities in Preoperative Visual Acuity and Cataract Surgery Utilization in the San Francisco Bay Area,” with David G. Hwang. 2024. *Journal of Racial and Ethnic Health Disparities* <https://doi.org/10.1007/s40615-024-01914-4>.

“A GPU-Accelerated Population Generation, Sorting, and Mutation Kernel for an Optimization-Based Causal Inference Model,” with Yan Y. Liu. 2023. In *52nd International Conference on Parallel Processing Workshops (ICPP-W 2023)*, August 7–10, 2023, Salt Lake City, UT, USA. ACM, New York, NY, USA.

“Deploying Trustworthy AI in the Courtroom: Lessons from Examining Algorithm Bias in Redistricting AI,” with Bruce E. Cain. *The University of Chicago Legal Forum* 2023 (2024): 87–114.

“Racial/Ethnic, Biomedical, and Sociodemographic Risk Factors for COVID-19 Positivity and Hospitalization in the San Francisco Bay Area,” with David G. Hwang. *Journal of Racial and Ethnic Health Disparities* 10 (August 2023): 1653–1668.

— Press coverage by [San Francisco Chronicle \(NextShark\)](#)

“Differential Effects of Race/Ethnicity and Social Vulnerability on COVID-19 Positivity, Hospitalization, and Death in the San Francisco Bay Area,” with David G. Hwang. *Journal of Racial and Ethnic Health Disparities* 10 (April 2023): 834–843.

— Press coverage by [Illinois News Bureau](#)

“AI and Redistricting: Useful Tool for the Courts or Another Source of Obfuscation?,” with Bruce E. Cain. *The Forum: A Journal of Applied Research in Contemporary Politics* 21 (2022): 1–14.

“A Parallel Evolutionary Multiple-Try Metropolis Markov Chain Monte Carlo Algorithm for Sampling Spatial Partitions,” with Yan Y. Liu. *Statistics and Computing* 31, Article 10 (2021).

“Human-Centered Redistricting Automation in the Age of AI,” with Bruce E. Cain.

*Science* 369, 6508 (September 4, 2020): 1179–1181.

— Press coverage by [TechCrunch \(Japanese version\)](#), [E.W. Scripps Television Stations](#), [Engadget](#), [Diginomica](#), [NetEase Intelligence](#)

“A Spatially Explicit Evolutionary Algorithm for the Spatial Partitioning Problem,” with Yan Y. Liu. *Applied Soft Computing Journal* 90 (May 2020): Article 106129.

“Parallel Hybrid Metaheuristics with Distributed Intensification and Diversification for Large-scale Optimization in Big Data Statistical Analysis,” with Yan Y. Liu. 2019. In C. Baru, J. Huan, L. Khan, X. T. Hu, R. Ak, Y. Tian, R. Barga, C. Zaniolo, K. Lee, & Y. F. Ye (Eds.), *Proceedings of the 2019 IEEE International Conference on Big Data*, pp. 3312–3320. Institute of Electrical and Electronics Engineers Inc.

## PUBLICATIONS (cont.)

- “Rejoinder to ‘Understanding our Markov Chain Significance Test’,” with Simon Rubinstein-Salzedo. *Statistics and Public Policy* 6, 1 (2019): 54.
- “Understanding Significance Tests from a Non-Mixing Markov Chain for Partisan Gerrymandering Claims,” with Simon Rubinstein-Salzedo. *Statistics and Public Policy* 6, 1 (2019): 44–49.
- “Technology-Enabled Coin Flips for Judging Partisan Gerrymandering.” *Southern California Law Review Postscript* 93 (May 2019): 11–27. [https://southerncalifornialawreview.com/wp-content/uploads/2019/06/93\\_Cho\\_Final.pdf](https://southerncalifornialawreview.com/wp-content/uploads/2019/06/93_Cho_Final.pdf)
- “Migration as an Opportunity to Register Changing Partisan Loyalty in the U.S.,” with James G. Gimpel and Iris Hui. *Population, Space and Place* 25, 4, e2218 (May 2019).
- “A Massively Parallel Evolutionary Markov Chain Monte Carlo Algorithm for Sampling Complicated Multimodal State Spaces,” with Yan Y. Liu. 2018. Extended Abstract. *SC18: The International Conference for High Performance Computing, Networking, Storage and Analysis*. November 11–16. Dallas, TX.
- “Algorithms Can Foster a More Democratic Society.” *Nature* 558, 7711 (June 28, 2018): 487. <https://www.nature.com/articles/d41586-018-05498-y>
- “Sampling from Complicated and Unknown Distributions: Monte Carlo and Markov Chain Monte Carlo Methods for Redistricting,” with Yan Y. Liu. *Physica A* 506 (September 2018): 170–178.
- “An Evolutionary Algorithm for Subset Selection in Causal Inference Models.” *Journal of the Operational Research Society* 69, 4 (2018): 630–644.
- “A Reasonable Bias Method for Redistricting: A New Tool for an Old Problem,” with Bruce E. Cain, Yan Y. Liu, and Emily Zhang. *William & Mary Law Review* 59, 5 (April 2018): 1521–1557.
- “A High-Performance Evolutionary Computation Framework for Scalable Spatial Optimization,” with Yan Y. Liu. 2018. *ICCS: International Conference on Computational Science: Science at the Intersection of Data, Modelling and Computation*. June 11–13. Wuxi, China.
- “Massively Parallel Evolutionary Computation for Empowering Electoral Reform: Quantifying Gerrymandering via Multi-objective Optimization and Statistical Analysis,” with Yan Y. Liu. 2017. Extended Abstract. *SC17: The International Conference for High Performance Computing, Networking, Storage and Analysis*. November 12–17. Denver, CO.
- “Measuring Partisan Fairness: How well does the Efficiency Gap Guard against Sophisticated as well as Simple-Minded Modes of Partisan Discrimination?” *University of Pennsylvania Law Review Online* 166 (July 2017): 17–36. <https://www.pennlawreview.com/wp-content/uploads/2020/05/166-U-Pa-L-Rev-Online-17.pdf>  
— Press coverage by *The Weekly Standard*, *WisCommunity*
- “Causal Inferences from Many Experiments.” *Journal of Applied Statistics* 44, 16 (2017): 2908–2922.
- “Toward a Talismanic Redistricting Tool: A Computational Method for Identifying Extreme Redistricting Plans,” with Yan Y. Liu. *Election Law Journal* 15, 4 (December 2016): 351–366.  
— First Place Winner of the 2016 Common Cause “Gerrymander Standard” writing competition.  
— Press coverage by *Cray Inc.*, the *National Center for Supercomputing Applications*, *Science Node*, *Chicago Inno*, *Vox*, *Quanta Magazine*, *HPC Wire*, *Top 500*, *WIRED*, *EdgyLabs*, *Admin Magazine*, *Primeur Magazine*, *Salon*, *Communications of the ACM*, the *Blue Waters Annual Report*, *Nature*, *Big Think*, *Reason*, *The Washington Post*, *NPR*, *NOVA PBS*, *eWeek*, *Communications of the ACM*, *Medium*, *Dziennikz Zwiazkowy Polish Daily News*, *Siam News*, *UI News Bureau*, *News-Gazette*, *Agence Science-Presse*, *Technet.cz*, the *Mathematical Association of America*, *Akron Beacon Journal*, *Cincinnati.com*, *The Indiana Lawyer*, *NCSA*, *R&D Magazine*, and *HPC Wire*.
- “A Scalable Evolutionary Algorithm with Intensification and Diversification Protocols Designed for Statistical Models,” with Yan Y. Liu. 2016. Extended Abstract. *SC16: The International Conference for High Performance Computing, Networking, Storage and Analysis*. November 13–18. Salt Lake City, UT.

## PUBLICATIONS (cont.)

- “PEAR: A Massively Parallel Evolutionary Computation Approach for Political Redistricting Optimization and Analysis,” with Yan Y. Liu and Shaowen Wang. *Swarm and Evolutionary Computation* 30 (October 2016): 78–92.
- “A Parallel Evolutionary Algorithm for Subset Selection in Causal Inference Models,” with Yan Y. Liu. 2016. In *Proceedings of XSEDE 2016: Diversity, Big Data, and Science at Scale*. Association for Computing Machinery, a7. ACM International Conference Proceeding Series. Volume 17–21. Article 7, pp. 1–8. July 17–21.
- “A High-Performance Approach for Solution Space Traversal in Combinatorial Optimization,” with Yan Y. Liu. 2015. Extended Abstract. *SC15: The International Conference for High Performance Computing, Networking, Storage and Analysis*. November 16–19. Austin, TX.
- “A Scalable Computational Approach to Political Redistricting Optimization,” with Yan Y. Liu and Shaowen Wang. 2015. In *Proceedings of the XSEDE 2015 Conference: Scientific Advancements Enabled by Enhanced Cyberinfrastructure*. Association for Computing Machinery, a6. ACM International Conference Proceeding Series. Article 6, pp. 1–2. July 26–30.  
— The overall redistricting project that began with this publication was the winner of the 2019 Hyperion Research [HPC Innovation Excellence Award](#) which recognizes scientific achievement by users of high performance computing (HPC) technologies.
- “An Information Theoretic Approach to Network Tomography,” with George Judge. *Applied Economics Letters* 22, 1 (January 2015): 1–6.
- “Voter Migration and the Geographic Sorting of the American Electorate,” with James G. Gimpel and Iris S. Hui. *Annals of the Association of American Geographers* 103, 4 (2013): 856–870.  
— Press coverage by [The New York Times](#), [Harvard Political Review](#), [London School of Economics US Centre Blog](#)
- “Balance Optimization Subset Selection (BOSS): An Alternative Approach to Causal Inference with Observational Data,” with Alexander Nikolaev, Sheldon H. Jacobson, Jason Sauppe, and Edward C. Sewell. *Operations Research* 61, 2 (March/April 2013): 398–412.
- “An Optimization Approach for Making Causal Inferences,” with Jason J. Sauppe, Alexander G. Nikolaev, Sheldon H. Jacobson and Edward C. Sewell. *Statistica Neerlandica* 27, 2 (May 2013): 211–226.
- “Geo-Graphs: An Efficient Model for Enforcing Contiguity and Hole Constraints in Planar Graph Partitioning,” with Douglas M. King, Sheldon H. Jacobson, and Edward C. Sewell. *Operations Research* 60, 5 (September–October 2012): 1213–1228.
- “Geographic Information Systems and the Spatial Dimensions of American Politics,” with James G. Gimpel. *Annual Review of Political Science* 15 (June 2012): 443–460.
- “The Tea Party and the Geography of Collective Action,” with James G. Gimpel and Daron R. Shaw. *Quarterly Journal of Political Science* 7, 2 (April 2012): 105–133.
- “An Analysis of Daily Predictions for the 2008 United States Presidential Election,” with Steven E. Rigdon, Sheldon H. Jacobson, Edward C. Sewell, and Christopher J. Rigdon. *Case Studies in Business, Industry and Government Statistics* 4, 1 (November 2011): 1–8.
- “Environmental Determinants of Racial Attitudes Redux: The Critical Decisions Related to Operationalizing Context,” with Neil Baer. *American Politics Research* 39, 2 (March 2011): 414–433.
- “Stigler’s Approach to Recovering the Distribution of First Significant Digits in Natural Data Sets,” with Joanne Lee and George G. Judge. *Statistics and Probability Letters* 80, 2 (February 2010): 82–88.
- “Rough Terrain: Spatial Variation in Campaign Contributing and Volunteerism,” with James G. Gimpel. *American Journal of Political Science* 54, 1 (January 2010): 74–89.
- “Legislative Success in a Small World: Social Network Analysis and the Dynamics of Congressional Legislation,” with James H. Fowler. *Journal of Politics* 72, 1 (January 2010): 124–135.

## PUBLICATIONS (cont.)

- "A Bayesian Prediction Model for the United States Presidential Election," with Steven E. Rigdon, Sheldon H. Jacobson, Edward C. Sewell, and Christopher J. Rigdon, *American Politics Research* 37, 4 (July 2009): 700–724.
- "Presidential Voting and the Local Variability of Economic Hardship," with James G. Gimpel, *The Forum: A Journal of Applied Research in Contemporary Politics* 7, 1 (April 2009). pp. 0000102202154088841286.
- "A Political Powerhouse in Search of a Home," with James G. Gimpel, *Asian American Policy Review* (2008) 17: 91–98.
- "Geographic Proximity versus Institutions: Evaluating Borders as Real Political Boundaries," with Erinn P. Nicley. *American Politics Research* 36, 6 (November 2008): 803–823.
- "Recovering Vote Choice from Partial Incomplete Data," with George G. Judge. *Journal of Data Science* 6, 2 (April 2008): 155–171.
- "Emanating Political Participation: Untangling the Spatial Structure behind Participation," with Thomas J. Rudolph. *British Journal of Political Science* 38, 2 (April 2008): 273–289.
- "Information Theoretic Solutions for Correlated Bivariate Processes," with George G. Judge. *Economics Letters* 97, 3 (December 2007): 201–207.
- "Breaking the (Benford) Law: Statistical Fraud Detection and Campaign Finance," with Brian J. Gaines. *The American Statistician* 61, 3 (August 2007): 218–223.
- "Prospecting for (Campaign) Gold," with James G. Gimpel. *American Journal of Political Science* 51, 2 (April 2007): 255–268.
- "Spatial Dimensions of Arab American Voter Mobilization after September 11," with James G. Gimpel, and Tony Wu. *Political Geography* 26, 3 (March 2007): 330–351.
- "Clarifying the Role of SES in Political Participation: Policy Threat and Arab American Mobilization," with James G. Gimpel and Tony Wu. *Journal of Politics* 68, 4 (November 2006): 974–988.
- "Residential Concentration, Socialization, and Voter Turnout," with James G. Gimpel and Joshua J. Dyck. *Journal of Politics* 68, 1 (February 2006): 156–167.
- "Panethnicity Revisited: Asian Indians, Asian American Politics, and the Voting Rights Act," with Albert H. Yoon. *UCLA Asian Pacific American Law Journal* 10 (2005): 8–30.
- "The Persistence of White Ethnicity in New England Politics," with James G. Gimpel. *Political Geography* 23, 8 (November 2004): 987–1008.
- "On California's 1920 Alien Land Law: The Psychology and Economics of Discrimination," with Brian J. Gaines. *State Politics and Policy Quarterly* 4, 3 (Fall 2004): 271–293.
- "Subcontinental Divide: Asian Indians and Asian American Politics," with Suneet P. Lad. *American Politics Research* 32, 3 (May 2004): 239–263.
- "The Limits of Ecological Inference: The Case of Split-Ticket Voting," with Brian J. Gaines. *American Journal of Political Science* 48, 1 (January 2004): 152–171.
- "Contagion Effects and Ethnic Contribution Networks." *American Journal of Political Science* 47, 2 (April 2003): 368–387.
- "Conceptualizing Space," with Luc Anselin. *Political Analysis* 10, 3 (Summer 2002): 301–303.
- "Spatial Effects and Ecological Inference," with Luc Anselin. *Political Analysis* 10, 3 (Summer 2002): 276–297.

**PUBLICATIONS (cont.)**

- "Tapping Motives and Dynamics Behind Campaign Contributions: Insights from the Asian American Case." *American Politics Research* 30, 4 (July 2002): 347–383.
- "Foreshadowing Strategic Pan-Ethnic Politics: Asian American Campaign Finance Activity in Varying Multicultural Contexts." *State Politics and Policy Quarterly* 1, 3 (September 2001): 273–294.
- "Asian-Pacific-American Campaigns, Elections, and Elected Officials," with James S. Lai, Thomas P. Kim, and Okiyoshi Takeda. *PS: Political Science and Politics* 34, 3 (September 2001): 611–617.
- "Latent Groups and Cross-Level Inferences." *Electoral Studies* 20, 2 (June 2001): 243–263.
- "Strange Bedfellows: Politics, Courts, and Statistics: Statistical Expert Testimony in Voting Rights Cases," with Albert H. Yoon. *Cornell Journal of Law and Public Policy* 10, 2 (Spring 2001): 237–264.
- "Naturalization, Socialization, Participation: Immigrants and (Non-) Voting." *Journal of Politics* 61, 4 (November 1999): 1140–1155.  
— Press coverage by [The Washington Post](#)
- "Iff the Assumption Fits...: A Comment on the King Ecological Inference Solution." *Political Analysis* 7 (1998): 143–163.
- "Asians—A Monolithic Voting Bloc?" *Political Behavior* 17, 2 (June 1995): 223–249.

**BOOK CHAPTERS**

- "Testing Causal Theories with Learned Proxies," with Dean Knox and Christopher Lucas, in Levi, Margaret and Nancy Rosenblum, eds., *Annual Review of Political Science*, Volume 25 (May 2022), pp. 419–441.
- "The Role of AI in Democratic Governance," *Beauty and Fear on the Cutting Edge: AI and Humanity*. Institute for Advanced Studies in the Humanities and Social Sciences. National Taiwan University. 2022.
- "Spatial Dimensions of American Politics," with Iris Hui in Cao, Kai and Elisabete A. Silva, eds., *Comprehensive Geographic Information Systems. GIS Applications for Socio-Economics and Humanity*. Elsevier. 2018, Volume 3, Chapter 13, pp. 181–188.
- "Legislative Networks," with Nils Ringe and Jennifer Nicoll Victor, in Victor, Jennifer Nicoll, Mark Lubell, and Alexander H. Montgomery, eds., *Oxford University Press Handbook of Political Networks*, Oxford University Press. 2017, Chapter 19, pp. 471–489.
- "Generalizing Benford's Law: A Re-examination of Falsified Clinical Data," with Joanne Lee and George Judge, in Miller, Steven J., Arno Berger, and Ted Hill, eds., *Theory and Applications of Benford's Law*, Princeton and Oxford: Princeton University Press. 2014, pp. 302–314.
- "Ecological Inference," in Badie, Bertrand, Dirk Berg-Schlosser, and Leonardo Morlino, eds., *International Encyclopedia of Political Science*, Sage Publications, Inc., 2011, pp. 1185–1187.
- "Demythicalizing the Asian-American Campaign Contributor," in Cain, Bruce E., Jaime Regalado, and Sandra Bass, eds., *Racial and Ethnic Politics in California, Volume III*, Berkeley, CA: Berkeley Public Policy Press, Institute of Governmental Studies, 2008, pp. 37–60.
- "Cross-Level/Ecological Inference," with Charles F. Manski, in Box-Steffensmeier, Janet, Henry E. Brady, and David Collier, eds., *Oxford Handbook of Political Methodology*. Oxford University Press, 2008, pp. 547–569.
- "An Information Theoretic Approach to Ecological Estimation and Inference," with George G. Judge and Douglas J. Miller, in King, Gary, Ori Rosen, and Martin Tanner, eds., *Ecological Inference: New Methodological Strategies*. Cambridge University Press, 2004, pp. 162–187.

**BOOK CHAPTERS (cont.)**

- “Campaigns, Elections, and Elected Officials,” with James S. Lai, Thomas P. Kim, and Okiyoshi Takeda, in Nakanishi, Don T. and James S. Lai, eds., *Asian American Politics: Law, Participation, and Policy*, Rowman & Littlefield Publishers, Inc., 2003, pp. 317–330. Reprinted from *PS: Political Science and Politics* 34, 3 (September 2001): 611–617.
- “Candidates, Donors, and Voters in California’s First Blanket-Primary Elections,” with Brian J. Gaines, in Cain, Bruce E. and Elisabeth R. Gerber, eds., *Voting at the Political Fault Line: California’s Experiment with the Blanket Primary*, Berkeley, CA: University of California Press, 2002, pp. 171–191.
- “Crossover Voting Before the Blanket: Primaries versus Parties in California History,” with Brian J. Gaines, in Cain, Bruce E. and Elisabeth R. Gerber, eds., *Voting at the Political Fault Line: California’s Experiment with the Blanket Primary*, Berkeley, CA: University of California Press, 2002, pp. 12–35.
- “Asian Americans as the Median Voters: An Exploration of Attitudes and Voting Patterns on Ballot Initiatives,” with Bruce E. Cain, in Chang, Gordon H., ed., *Asian Americans and Politics: Perspectives, Experiences, Prospects*, Washington, DC: Woodrow Wilson Center Press and Stanford, CA: Stanford University Press, 2001, pp. 133–152.

**RESEARCH GRANTS****NATIONAL SCIENCE FOUNDATION GRANTS**

- National Science Foundation, Social, Behavioral, and Economic Sciences. Political Science Program. 2017–2020. “Collaborative Research: High-Performance Computational Standards for Redistricting.” Principal Investigator. Co-PIs: Yan Liu and Bruce Cain. Grant No. SES-1725418/1728902. \$453,476.
- National Science Foundation, Major Research and Instrumentation Program. Software Institutes. 2014–2017. “Acquisition of a National CyberGIS Facility for Computing and Data-Intensive Geospatial Research and Education.” Senior Personnel. Grant No. 1429699. \$1,787,335.
- National Science Foundation, Social, Behavioral, and Economic Sciences. Methodology, Measurement, and Statistics Program and Political Science Program. 2009–2012. Research Grant for the project “Collaborative Research: Shifting Paradigms: Causal Inference via Subset Selection.” Principal Investigator. Co-PIs: Sheldon Jacobson and Edward Sewell. Grant No. SES-0849223. \$278,767.
- National Science Foundation, Computer & Information Science & Engineering Program, Information, Integration, and Informatics Cluster. 2008–2009. Research Grant for the project “A Computational Approach to Zoning Analysis.” Principal Investigator. Co-PI: Sheldon Jacobson. Grant No. IIS-0827540. \$99,999
- National Science Foundation, Social, Behavioral, and Economic Sciences. Methodology, Measurement, and Statistics Program. 1998–1999. Research Grant for the project “Advancement of Methods for Ecological Inference.” Principal Investigator. Grant No. SBR-9806448.

**SUPERCOMPUTING GRANTS**

- NCSA Delta GPU Supercomputing Allocation Grant, “Understanding and Mitigating Racial Disparities in COVID-19 through High Performance Computing-Enabled Causal Inference Analysis.” Principal Investigator (Co-PI: Yan Y. Liu). 2022–2024. **3K GPU hours** and **50k CPU hours**.
- COVID-19 HPC Consortium and NSF XSEDE Allocation Grant, “High-Performance Causal Inference for COVID-19 Mitigation and Response.” Co-Principal Investigator (PI: Yan Y. Liu, Co-PI David G. Hwang). 2020–2022. **38K CPU hours** on Pittsburgh Supercomputing Center (PSC) Bridges-2, **1,400 GPU hours** on PSC Bridges-2 GPU-AI, and **1,000 node hours** on Texas Advanced Computing Center (TACC) Stampede2.

- Blue Waters Supercomputing Allocation Grant, “Parallel Hybrid Metaheuristics with Distributed Intensification and Diversification for Large-scale Optimization in Statistical Analysis.” Principal Investigator (Co-PI: Yan Y. Liu). 2019–2020. One-year allocation of 50,000 node hours, approximately **0.8 million normalized computing hours** on Blue Waters’s 724,480 processor cores.
- San Diego Supercomputing Center (SDSC) Comet Supercomputing Allocation Grant. “Extreme-Scale Computing for Large Spatial Optimization and Sampling.” Principal Investigator (Co-PI: Yan Y. Liu). 2019–2020. NSF XSEDE Allocation Award. **1,000 GPU hours**.
- Texas Advanced Computing Center (TACC) Stampede2 Supercomputing Allocation Grant. “Extreme-Scale Computing for Large Spatial Optimization and Sampling.” Principal Investigator (Co-PI: Yan Y. Liu). 2019–2020. NSF XSEDE Allocation Award. 1,600 node hours, approximately **108,800 normalized computing hours** on Stampede2’s 285,600 Knights Landing and 83,328 Skylake processor cores.
- Blue Waters Supercomputing Allocation Grant, “Massively Parallel Evolutionary Markov Chain Monte Carlo for Sampling Complicated Multimodal State Spaces.” Principal Investigator (Co-PIs: Yan Y. Liu and Simon Rubinstein-Salzedo). 2018–2019. One-year allocation of 100,000 node hours, approximately **1.6 million normalized computing hours** on Blue Waters’s 724,480 processor cores.
- Blue Waters Supercomputing Allocation Grant, “Enabling Redistricting Reform: A Computational Study of Zoning Optimization.” Principal Investigator (Co-PIs: Yan Y. Liu and Bruce Cain). 2017–2018. One-year allocation of 400,000 node hours, approximately **6.4 million normalized computing hours** on Blue Waters’s 724,480 processor cores.
- Blue Waters Supercomputing Allocation Grant, “A Computational Model for Causal Inference via Subset Selection.” Principal Investigator. 2015–2016. One-year allocation of 50,000 node hours, approximately **800,000 normalized computing hours**, on Blue Waters’s 724,480 processor cores.
- Blue Waters Supercomputing Allocation Grant, “An Extreme-Scale Computational Approach to Redistricting Optimization.” Co-Principal Investigator (Co-PIs: Shaowen Wang and Yan Y. Liu). 2013–2015. One-year allocation of 0.6 million node hours, approximately **9.8 million normalized computing hours**, on Blue Waters’s 724,480 processor cores.

#### ADDITIONAL RESEARCH GRANTS

- Regents of the University of California (San Francisco) Grant, “Racial Health Disparities” to support research on racial health disparities across a variety of health conditions. 2023.
- New Frontier Initiative Grant, “Understanding and Mitigating Racial Disparities in COVID-19 through High Performance Computing Enabled Causal Inference Analysis,” to support a concentrated research effort that further builds on research that utilized or benefited from Blue Waters and will help expand Illinois’ activities and contributions to national security and safety while supporting the NSF’s goals to “promote the progress of science; to advance the national health, prosperity and welfare; to secure the national defense.” 2022.
- Interdisciplinary Innovation Initiative (In<sup>3</sup>) Grant, “Analytical Enhancements to a Unique UI Resource.” Co-Principal Investigator (with Scott Althaus, Peter Nardulli, Dan Roth, and Joseph Houston). 2012. \$50,000.
- CIRCLE/Pew Charitable Trusts Project Grant, “Field Experiments on Turnout in the 2004 Elections.” 2004. Co-Principal Investigator (with James Gimpel and Daron Shaw).
- Ahmanson Community Trust Foundation Grant, “Statistical Approaches to the Analysis of Surname Coded Data.” Principal Investigator, James Gimpel. Project Subcontract to Wendy K. Tam Cho January 2002–January 2005. Total Grant: \$101,000.
- University of Illinois Course Development Grant, 1999.
- University of Illinois Research Board Grant, 1999–2000, 2001–2002.
- Arnold O. Beckman Research Distinction Grant Award. University of Illinois Research Board. 1998–1999.



## HONORARY SOCIETIES

[John Simon Guggenheim Memorial Foundation Fellow](#). 2015–2016. Guggenheim Fellows are appointed on the basis of impressive achievement in the past and exceptional promise for future accomplishment.

Elected Fellow. 2018. Society for Political Methodology. Selection to the position of Fellow of the Society for Political Methodology honors individuals who have made outstanding scholarly contributions to the development of political methodology, and whose methodological work has had a major international impact on subsequent scholarship in the field, in the discipline more broadly, and where appropriate in other areas.

## AWARDS AND HONORS

### Teaching

[Grainger College of Engineering COVID-19 Teaching Recognition](#). University of Illinois at Urbana-Champaign, Department of Computer Science, 2022 Celebration of Excellence. The award recognizes individuals and affiliates that came together in various ways during the pandemic to create life-changing solutions.

List of Teachers Ranked as Excellent by their Students. University of Illinois at Urbana-Champaign. Multiple Years.

### Research

[HPC Innovation Excellence Award](#) by Hyperion Research at [ISC19](#), June 2019, Frankfurt, Germany. The award recognizes outstanding applications of high performance computing (HPC) for business and scientific achievements.

First Place Winner in the 2016 Common Cause “Gerrymander Standard” writing competition for the article, “Toward a Talismanic Redistricting Tool: A Fully Balanced Computational Method for Identifying Extreme Redistricting Plans,” with Yan Y. Liu.

Leon Weaver Award for “Migration and Party Switching in the American Electorate.” Best Paper presented at a panel sponsored by the APSA Representation and Electoral Systems Division in 2010.

### Community

Volunteer of the Year. 1997. Alzheimer’s Services of the East Bay (ASEB). Berkeley, CA. ASEB is committed to pioneering dementia-friendly communities that provide quality adult health care services for vulnerable populations.

## FELLOWSHIPS AND APPOINTMENTS

Visiting Fellow. Hoover Institution. Stanford University. 2018–2021.

Fellowship. Center for Advanced Study in the Behavioral Sciences. Stanford University. 2019–2020.

Research Associate. 2014–15. Center for Advanced Study. University of Illinois at Urbana-Champaign. Research appointment to pursue project, “An Extreme-Scale Computational Approach to Redistricting Analysis.”

Merriam Professorial Scholar. 2010–2012. Cline Center for Democracy. University of Illinois at Urbana-Champaign.

Faculty Fellowship. National Center for Supercomputing Applications. University of Illinois at Urbana-Champaign. Summer 2006.

Fellowship. Center for Democracy in a Multiracial Society. University of Illinois at Urbana-Champaign, AY 2004–2005.

## MEMBERSHIP IN PROFESSIONAL SOCIETIES

American Political Science Association (APSA)

Midwest Political Science Association (MPSA)

Institute of Electrical and Electronics Engineers (IEEE)

Association for Computing Machinery Special Interest Group on High Performance Computing (ACM sigHPC)

## BOOK REVIEWS

“Asian American Political Action: Suburban Transformation,” by James S. Lai.

*Political Science Quarterly* 127, 1 (Spring 2012): 165–166.

“The Snake Dance of Asian American Activism: Community, Vision, and Power,” by Michael Liu, Kim Geron, and Tracy Lai. *Political Science Quarterly* 125, 2 (Summer 2010): 326–329.

“The Election After Reform: Money, Politics, and the Bipartisan Campaign Reform Act,” by Michael Malbin, ed. *Election Law Journal* 6, 1 (January 2007): 100–103.

“Why Americans Split Their Tickets: Campaigns, Competition and Divided Government,” by Barry C. Burden and David C. Kimball. *Party Politics* 10, 2 (January 2004): 241–243.

“Political Participation and Ethnic Minorities: Chinese Overseas in Malaysia, Indonesia, and the U.S.,” by Amy Freedman. *Journal of Social Issues in Southeast Asia* 18, 1 (April 2003): 164–167.

“The Making of Asian America through Political Participation,” by Pei-te Lien. *Perspectives on Politics* 1, 1 (March 2003): 190–191.

“Econometric Foundations,” by Ron C. Mittelhammer, George G. Judge, and Douglas J. Miller. *The Political Methodologist* 10, 2 (Spring 2002): 18–19.

“A Solution to the Ecological Inference Problem: Reconstructing Individual Behavior from Aggregate Data,” by Gary King. *Journal of Politics* 60, 4 (November 1998): 1244–1245.

## BLOGS, PODCASTS, POPULAR PRESS, NEWSLETTERS, AND OTHER WRITINGS

“Roots of Reality Experiences: Technology and Gerrymandering with Dr. Wendy K. Tam Cho.” [Roots of Reality Podcast](#). November 9, 2021.

“Redistricting and North Carolina.” [The News & Observer](#). October 8, 2021.

“Repairing Political Redistricting.” [Center for Advanced Study of the Behavioral Sciences Human Centered Podcast](#). April 23, 2020.

“For Partisan Gerrymandering, an Ounce of Prevention is Worth a Pound of Cure.” [Election Law Blog](#). July 3, 2019.

“Technology-Enabled Coin Flips for Judging Partisan Gerrymandering.” [Election Law Blog](#). May 26, 2019.

“The ‘Everything Bagel’ in Redistricting” (with Yan Liu, Bruce Cain, and Emily Zhang). [Election Law Blog](#). May 27, 2018.

“Voter Migration is a Significant Factor in the Geographic Sorting of the American Electorate.” [LSE US Centre](#).

“Pay Attention to Asian-American Voters,” with James G. Gimpel. *The Politico* 1, 51 (May 2007): 3–4.

“Getting Out the Asian American Vote: The Value in the Unpredictable,” with James G. Gimpel. *Campaigns and Elections* 25, 6 (July 2004): 44–45.

“Open Source Spatial Data Analysis,” *The Political Methodologist* 12, 2 (Fall 2004): 13–17.

**INVITATIONS (selected)**

Keynote Speaker. National Taiwan University Center for Artificial Intelligence and Advanced Robotics Meeting with Tohoku University (Japan). Taipei, Taiwan. March 2021.

Invited Speaker. Institute for Advanced Studies in the Humanities and Social Sciences. National Taiwan University. Taipei, Taiwan. March 2021.

Invited Speaker. Department of Computer Science. National Taiwan University. Taipei, Taiwan. March 2021.

Invited Speaker. Department of Mathematics. National Taiwan University. Taipei, Taiwan. March 2021.

Invited Speaker. Department of Psychology. National Taiwan University. Taipei, Taiwan. March 2021.

**Keyfitz Lecture.** The Fields Institute for Research in Mathematical Sciences. Toronto, Canada. May 2020. Lecturers are selected by a distinguished international committee consisting of both mathematicians and social scientists. The Fields Institute is a leading Canadian research centre, which promotes activities in a broad range of areas relating to the mathematical sciences (mathematics, statistics, computer science) and all of their applications.

Keynote Speaker. Master of Mathematical Finance Symposium: The World Forum on Finance, Technology, Investments & Risk Management. The Blue Mountains, Ontario, Canada. January 2019.

Invited Speaker. Annual Meeting of the Missouri Bar and Judicial Conference. St. Louis, MO. September 2018.

Invited Speaker. *The Inaugural Year Series*. Sarah Lawrence College. Invited by Mathematics Department. Bronxville, NY. April 2018.

Invited Speaker. Mathematics in Science and Society Colloquium. University of Illinois at Urbana-Champaign. Mathematics Department. February 2018.

Invited Speaker. Data Institute SF Conference. Drawing leaders of industry and academia to explore the latest theoretical advances and technological applications in data science in order to promote the next generation of cross-disciplinary research. University of San Francisco. October 2017. Declined.

Invited Speaker. Canadian Industrial and Applied Mathematics Society Annual Meeting. Halifax, Nova Scotia. July 2017. Declined.

Invited Keynote Speaker. GIS Day: A Celebration of GIS Research and Application across Disciplines. Purdue University. November 2016.

Invited Workshop Presenter. Neural Information Processing Systems (NIPS), a single-track machine learning and computational neuroscience conference, Montréal, Canada. December 2015.

Invited Speaker. Initiative for Mathematical Science and Engineering. Applied Geometry and Topology and Networks, Learning, and Games Conference. University of Illinois at Urbana-Champaign Mathematics Department. February 2014.

Invited Keynote Speaker. November 2010. Political Geography Conference. University of Copenhagen. Denmark.

Invited Distinguished Speaker. 2008. U.S. Army Conference on Applied Statistics. Virginia Military Institute, Lexington, Virginia.

**PROFESSIONAL ACTIVITIES AND SERVICE****Offices**

APSA Executive Council, 2007–09, Governing Board for the American Political Science Association (elected by discipline-wide election)

Member-at-Large, Society for Political Methodology, APSA Section, 2004–2006.

**Editor**

*Political Analysis*, 2009–2010, with Robert Franzese and Andrew Martin.

*The Political Methodologist*, 2010–2013, with Jake Bowers and Brian Gaines.

### **Associate Editor**

*Political Analysis*, 2007–2009.

### **Editorial Board Member**

Science Advisory Board, Board of Reviewing Editors, 2022–2024.

*American Journal of Political Science*, 2018–2023.

*American Politics Research*, 2003–2019.

*American Political Science Review*, 2012–2020.

*Journal of Politics*, 2007–2009, 2010–2014.

*Journal of Election Technology and Systems*, 2013–2016.

*Political Analysis*, 2005–2007.

*Political Behavior*, 2019–2023.

*PS: Political Science & Politics*, 2006–2009.

*Ralph Bunche Journal of Public Affairs*, 2008–2012.

SSRN, *Political Methods: Quantitative Methods*, 2007–2010.

*State Politics and Policy Quarterly*, 2004–2014.

### **Award Committees**

R.H. Durr Award Committee for the best paper applying quantitative methods to a substantive issue. Midwest Political Science Association, 2020.

Heinz Eulau Award Committee to recognize the best article published in the *American Political Science Review* during the previous academic year. 2019.

Political Methodology Career Award Committee to recognize an outstanding career of intellectual accomplishment and service to the profession in the Political Methodology field. 2015–2018.

Best Graduate Student Poster Award Committee for best graduate student poster presented at the Political Methodology Conference in 2014.

Best Paper Award Committee to recognize the best paper published in the *American Politics Research* journal in 2013.

Emerging Scholar Award Committee for a scholar within ten years of his degree, who is making notable contributions to the field of political methodology, 2011 & 2012.

Franklin L. Burdette Pi Sigma Alpha Award Committee (Chair) for the best paper presented at the Annual Meeting of the American Political Science Association, 2009.

R.H. Durr Award Committee for the best paper applying quantitative methods to a substantive issue. Midwest Political Science Association, 2004.

Harold Gosnell Award Committee for excellence in political methodology awarded for best methodology conference paper, 2004.

Warren Miller Prize Committee for best article published in *Political Analysis*, 2004.

### **Program Coordinator/Committees**

Technical Program Committee, The Third International Workshop on Parallel and Distributed Algorithms for Decision Sciences (PDADS 2023), co-hosted with the 52nd International Conference on Parallel Processing (ICPP). Salt Lake City, Utah. August 7–10, 2023.

Program Committee, Annual Summer Political Methodology Conference. The Society for Political Methodology, Stanford University, Stanford, CA. 2023.

Selection Committee, Keyfitz Lecture in Mathematics and the Social Sciences. The Fields Institute for Research in Mathematical Sciences. 2022.

Graduate Admissions Committee, Annual Summer Political Methodology Conference. The Society for Political Methodology, University of Toronto, Toronto, Canada. 2020.

- Methodology Section Head, Annual Conference of the Midwest Political Science Association, Chicago, IL, 2016.
- Program Committee, Annual Summer Political Methodology Conference, The Society for Political Methodology, Princeton University, Princeton, NJ. 2011.
- Graduate Admissions Committee, Annual Summer Political Methodology Conference, The Society for Political Methodology, University of Michigan, Ann Arbor, MI. 2008.
- Methodology Section Head, Annual Conference of the Southern Political Science Association, New Orleans, LA, 2007.
- Program Committee, Annual Summer Political Methodology Conference, The Society for Political Methodology, Stanford University, Stanford, CA. 2004.
- Methodology Section Head, Annual Meeting of the Southern Political Science Association, New Orleans, LA, 2004.

### Advisory Boards and Panels

- Science* Advisory Board. Board of Reviewing Editors. The Advisory Board advises about general matters such as timely research areas, which manuscripts should be sent out for in-depth review, suggests referees, and paper post-review. 2022–
- National Science Foundation. Designing Accountable Software Systems (DASS) Program, bringing together Computer and Information Science and Engineering (CISE) with Law and Social Sciences to develop software design for privacy, policy, fairness, and regulatory compliance. 2021, 2022. Declined.
- National Center for Supercomputing Applications (NCSA) Resource Allocation Committee. Reviewed proposals for resource allocation grants on the Delta supercomputer. 2021–2023.
- National Science Foundation. National AI Research Institutes Program. NAIRI Theme 2: AI Institute for Advances in Optimization Panel. 2020. Declined.
- National Center for Supercomputing Applications (NCSA) Resource Allocation Committee. Reviewed proposals for resource allocation grants on the Blue Waters supercomputer. 2020–2021.
- Educational Advisory Board. John Simon Guggenheim Foundation. 2019–2023.
- National Science Foundation. Division of Information & Intelligent Systems (IIS). Computer & Information Science & Engineering Program (CISE). BIG DATA Computer and Network Systems Panel. 2018.
- President of the Board of Directors. C&!: Camp for Algorithmic and Mathematical Play. A Computer Science and Mathematics Summer Camp for Children who Love Math. 2020–2023.
- Member of Board of Directors. C&!: Camp for Algorithmic and Mathematical Play. A Computer Science and Mathematics Summer Camp for Children who Love Math. 2017–2020, 2023–2025.
- National Science Foundation. Division of Social, Behavioral, and Economic Sciences. Resource Implementations for Data Intensive Research in the Social Behavioral and Economic Sciences Panel (RIDIR), 2017.
- National Science Foundation. Committee of Visitors. NSF Advisory Committee. Methodology, Measurement, and Statistics Program representative for the Social, Behavioral and Economic Sciences Division (SBE). Reviewed and advised programs in SBE to help shape the future direction of the NSF SBE program. 2016.
- Advisory Board. Program for Interdisciplinary and Industrial Internships at Illinois (PI4). PI4 is an NSF funded program to broaden the research background and the future career prospects of mathematics graduate students. 2014–2019.
- Academic Expert to the Presidential Commission on Election Administration. Commission established by President Obama to identify best practices and make recommendations to promote the efficient administration of elections. 2013.

- Advisory Board. Danish Research Council funded project on contextual influences on social and political attitudes. University of Copenhagen and Aarhus University. 2013–2016.
- National Science Foundation. Division of Social, Behavioral, and Economic Sciences and Division of Education and Human Resources. Building Community and Capacity for Data-Intensive Research Panel. 2012.
- National Science Foundation. Division of Social, Behavioral, and Economic Sciences. Methodology, Measurement, and Statistics Panel, 2011–2012.
- National Science Foundation, Division of Information and Intelligent Systems. Human Centered Computing Cluster CAREER Panel. 2010. Declined.
- National Science Foundation. Division of Information and Intelligent Systems. Computing in the Cloud Panel, 2010.
- Review Panel, *Digging into Data*, joint funding initiative of the National Endowment for the Humanities, the National Science Foundation, Canada's Social Sciences and Humanities Research Council, and the UK's Joint Information Systems Committee. 2009. Declined.
- Invited Member of the bipartisan Immigration Policy Roundtable to advise Congress and President Obama on a new immigration policy agenda. 2008–2009. Declined.
- National Science Foundation. Division of Social, Behavioral, and Economic Sciences. Political Science Panel, 2006–2007.
- National Science Foundation. Division of Social and Economic Sciences. Methodology, Measurement, and Statistics Program. Mathematical, Social, and Behavioral Sciences Panel, 2004.

## Outreach

- Invited Faculty. Epsilon Camp. Summer 2024. A Mathematics Summer Program for 7 to 12 year olds who are captivated by math. Miami University. Oxford, Ohio.
- Inaugural Faculty. Math in the Mountains. Summer 2023. An intensive and individualized math camp for children. Teton Science Schools. Jackson, Wyoming.
- Instructor. Osher Lifelong Learning Institute (OLLI) course, "Problem Solving and Mathematical Reasoning." Fall 2022. OLLI provides affordable, accessible, high-quality educational programs designed for people fifty and older in the central Illinois region.
- Instructor. Osher Lifelong Learning Institute (OLLI) course, "Contemporary Political and Racial Issues." Fall 2022. OLLI provides affordable, accessible, high-quality educational programs designed for people fifty and older in the central Illinois region.
- Regeneron Science Talent Search. Society for Science. 2022 Project, Mentor. 2023 Project, Mentor. Named "the one person who has been most influential in the development of my scientific career" for project by a Top 300 Scholar.
- Invited Course Instructor. Math for America. 2021. Mfa is a nonprofit organization committed to keeping outstanding teachers teaching in the classroom and making a lasting impact on their students, their schools, and their communities.
- Founder, Teacher, and Organizer. Champaign-Urbana Math Circle. Weekly educational mathematics enrichment and outreach program open to children and adults of all ages. 2013–2020.
- Coach. MATHCOUNTS Team. Nationwide Middle School Math Program. 2016–2018. First Place Team in Northern California East Bay Regional Competition. 2017.
- Invited Faculty. C&!: Camp for Algorithmic and Mathematical Play. Summer 2018; Summer 2019; Summer 2020; Summer 2022; Summer 2023. Summer 2024. A Computer Science and Mathematics Summer Camp for Children who Love Math. University of New Mexico. Albuquerque, NM.
- Founding Faculty. C&!: Camp for Algorithmic and Mathematical Play. Summer 2017. A Computer Science and Mathematics Summer Camp for Children who Love Math. University of Arkansas. Fayetteville, AR.

Volunteer. CU One-to-One Mentor. Champaign-Urbana Public School Mentoring Program. Multiple Years. Barkstall Elementary School, Champaign, IL.

Invited Faculty. Epsilon Camp. Summer 2016. A Mathematics Summer Program for 7 to 11 year olds who are captivated by math. Washington University. St. Louis, MO.

Invited Faculty. AwesomeMath Camp. Summer 2015. A three-week intensive summer camp for mathematically gifted students from around the globe. Cornell University. Ithaca, NY. Declined.

Invited Faculty. Delta Camp. Summer 2015. A Mathematics Summer Program for 6.5 to 8 year olds who are lit up by math. Washington University. St. Louis, MO.

Invited Faculty. Delta Camp. Summer 2014. A Mathematics Summer Program for 6 and 7 year olds with extremely high IQs. Seattle Pacific University. Seattle, WA.

Invited Faculty. Epsilon Camp. Summer 2012. A Mathematics Summer Camp for Exceptionally and Profoundly Gifted Children. Colorado College. Colorado Springs, CO.

Instructor. University Laboratory High School Summer Program. 2011. Taught "Math, Sports, Puzzles, and Games." Urbana, IL.

### University Committees (selected)

CRESS/ATLAS Advisory Committee (College Committee), 2002.

Council on General Education (College Committee), 2008–2009.

Committee on Admissions and Academic Standards (College Committee), 2010–2011.

Campus Research Board (2014–2017).

### Discipline Committees (selected)

Long Range Planning Committee. Society for Political Methodology. 2017–2019, 2022–.

Diversity Committee. Society for Political Methodology. 2008–2016.

APSA Council Finance Committee 2009.

MPSA Nominations Committee, 2010.

Co-Chair, APSA Committee on the Status of Asian Pacific Americans in the Profession, 2011–2014.

APSA Minority Fellowship Selection Committee, 2011–2013.

### Promotion/Tenure and Department Reviews

Boston College

Chinese University of Hong Kong

Columbia University

Cornell University

Georgetown University

Harvard University

National Research University, Higher School  
of Economics (Moscow, Russia)

Northwestern University

Scripps College

Stanford University

Pennsylvania State University

Princeton University

Tsinghua University (Beijing, China)

University at Buffalo

University of California at Berkeley

University of California at Irvine

University of Illinois at Urbana-Champaign

University of Michigan

University of Massachusetts Amherst

University of Missouri at Columbia

University of North Texas

University of Texas at Dallas

Yale University

**INVITED TALKS****Academic/University Talks**

Academia Sinica (Taiwan)  
 Blue Waters Symposium  
 Brown University  
 Calvin College  
 College of William and Mary  
     Law School  
 Colorado College  
 Columbia University  
     Institute for Social and Economic Research  
     and Policy  
     Political Science Department  
 Cornell University  
 Dartmouth University  
 Duke University  
 Florida State University  
 Georgetown University  
 Massachusetts Institute of Technology  
 National Taiwan University  
     Computer Science Department  
     Mathematics Department  
     Psychology Department  
     Center for Artificial Intelligence and  
     Advanced Robotics  
     Institute for Advanced Studies in the  
     Humanities and Social Sciences  
 National Taiwan University of Science and  
 Technology  
 Northwestern University  
     Mathematics Department  
     Emerging Scholars Program  
     Political Science Department  
     Statistics Department  
 Pennsylvania State University  
 Pontificia Universidad Católica de Chile  
 Princeton University  
 Purdue University  
     Political Science Department  
     Statistics Department  
     Libraries and School of Information Studies  
 Rice University  
 Rochester University  
 Sarah Lawrence College  
 Seattle Pacific University  
 Stanford University  
     Center for Advanced Study in the  
     Behavioral Sciences  
     Political Science Department  
 Tohoku University, Japan  
 Toulouse School of Economics, France  
 University of California at Berkeley  
 University of California at Davis  
 University of California at Los Angeles  
     Institute for Pure and Applied Mathematics  
 University of California at Santa Barbara  
 University of Chicago  
     Political Science Department  
     Law School  
 University of Copenhagen, Denmark  
 University of Illinois at Urbana-Champaign  
     Center for Advanced Study  
     Computer Science Department  
     Coordinated Science Laboratory  
     Graduate Society of Women Engineers  
     Law School  
     National Center for Supercomputing  
     Applications  
     New Frontiers Institute  
     Mathematics Department  
     Political Science Department  
     Psychology Department  
     Science Policy Group  
     Statistics Department  
 Tufts University  
 University of Michigan  
 University of Pennsylvania  
 University of Rochester  
 University of Toronto  
     Fields Institute for Research in Mathematical  
     Sciences  
 University of Washington  
 University of Wisconsin, Madison  
 University of San Francisco  
     Mathematics Department  
     Analytics/Data Science Program  
 Virginia Military Institute  
 Vanderbilt University  
     Computer Science Department  
     Mathematics Department  
     Political Science Department  
 Washington University St. Louis  
 Yale University



**Para-Academic Talks**

AKASA Healthcare AI  
 Illinois State Legislature  
 Man Group  
 Quantitative Investment Management

Missouri Bar Association  
 Oak Ridge National Laboratory  
 Sandia National Laboratories  
 Santa Fe Institute

**Outreach Talks**

Awesome Math Summer Camp (Ithaca, NY)  
 Central High School (Champaign, IL)  
 Chelsea Career and Technical Education High  
 School (Manhattan, NY)  
 Girls Who Code (Champaign, IL)  
 Math for America (non-profit)

Next Generation School (Champaign, IL)  
 Leaders High School (Brooklyn, NY)  
 Leal Elementary School (Urbana, IL)  
 Nueva School (Hillsborough, CA)  
 Proof School (San Francisco, CA)  
 Santa Cruz Math Circle (Santa Cruz, CA)

**REVIEWER (for over 145 different academic journals, agencies, foundations, or presses, spanning more than a dozen disciplines)**

*Academic Pediatrics*  
*Advances in Statistical Analysis*  
*American Journal of Political Science*  
*American Political Science Review*  
*American Politics Research*  
*Annals of the American Association of Geographers*  
*Applied Geography*  
*Automation in Construction*  
*British Journal of Political Science*  
*California Journal of Politics and Policy*  
*Communications in Statistics*  
*Communication Research*  
*Comparative Political Studies*  
*Computer Methods and Programs in Biomedicine*  
*Computers and Geosciences*  
*Computers in Human Behavior*  
*DuBois Review*  
*Economics Letters*  
*Election Law Journal*  
*Electoral Studies*  
*Endocrine, Metabolic & Immune Disorders—Drug  
 Targets*  
*Entropy*  
*Epidemiology and Infection*  
*Ethnic and Racial Studies*  
*European Journal of Operational Research*  
*Geographical Analysis*  
*GeoJournal*  
*Gerontology Studies*  
*Habitat International*  
*Harvard Data Science Review*  
*Heliyon*

*Historical Methods*  
*International Interactions*  
*International Journal of Forecasting*  
*International Journal of Atomic and Nuclear Physics*  
*International Journal of Community Medicine and  
 Public Health*  
*International Journal of Public Health*  
*International Journal of Public Opinion Research*  
*International Organizations*  
*International Regional Science Review*  
*International Review of Administrative Sciences*  
*International Studies Quarterly*  
*Journal of East Asian Studies*  
*Journal of Applied Statistics*  
*Journal of the Association for Information Science  
 and Technology*  
*Journal of Computational and Graphical Statistics*  
*Journal of Clinical Epidemiology*  
*Journal of East Asian Studies*  
*Journal of General Internal Medicine*  
*Journal of Geographical Systems*  
*Journal of International Students*  
*Journal of Mathematical and Statistical Analysis*  
*Journal of Mathematical Psychology*  
*Journal of the Operational Research Society*  
*Journal of Parallel and Distributed Computing*  
*Journal of Political Marketing*  
*Journal of Political Science Education*  
*Journal of Politics*  
*Journal of Racial and Ethnic Health Disparities*  
*Journal of Race, Ethnicity, and Politics*  
*Journal of the American Statistical Association*  
*Journal of the Royal Society Interface*  
*Journal of the Royal Statistical Society*

*Journal of Statistical Software*  
*Journal of Statistical Computation and Simulation*  
*Journal of Theoretical Politics*  
*Journal of Women, Politics, and Policy*  
*Law & Policy*  
*Legislative Studies Quarterly*  
*Mathematical and Computational Applications*  
*Mathematical Biosciences and Engineering*  
*Mathematics*  
*Midsouth Political Science Review*  
*Nature: International Journal of Science*  
*Nonprofit and Voluntary Sector Quarterly*  
*Nucleic Acids Research*  
*Open Statistics and Probability Journal*  
*Optics and Laser Technology*  
*Papers of Applied Geography Conferences*  
*Party Politics*  
*Perspectives on Politics*  
*PLOS ONE*  
*Political Analysis*  
*Political Behavior*  
*Political Opinion Quarterly*  
*Political Research Quarterly*  
*Political Science Research and Methods*  
*Politics & Gender*  
*Politics, Groups, and Identities*  
*Population Research and Policy Review*  
*Proceedings of the National Academy of Sciences*  
*The Professional Geographer*  
*PS: Political Science & Politics*  
*Public Choice*  
*Public Health*  
*Quarterly Journal of Political Science*  
*Research & Politics*  
*Review of Economics and Statistics*  
*Review of International Organizations*  
*Rural Sociology*  
*Sankhya B: The Indian Journal of Statistics*  
*Science*  
*Scientific Reports*  
*Social Forces*  
*Social Networks*  
*Social Problems*  
*Social Science Research*  
*Social Science Quarterly*  
*Socio-Economic Planning Sciences*  
*Sociological Forum*

*Sociological Methodology*  
*Sociological Methods and Research*  
*SoftwareX*  
*Swarm and Evolutionary Computation*  
*TEST: An Official Journal of the Spanish Society*  
*of Statistics and Operations*  
*The American Statistician*  
*Theoretical Economics Letters*  
*Urban Affairs Review*  
*World Politics*  
 C3.ai Digital Transformation Institute  
 Cambridge University Press  
 Chapman & Hall/CRC  
 Guggenheim Fellowship  
 Houghton Mifflin  
 Illinois Community Informatics Initiative  
 Israel Science Foundation  
 John D. and Catherine T. MacArthur Foundation  
 Kuwait Foundation for the Advancement of  
 Sciences  
 National Science Foundation  
 Committee of Visitors  
 Division of Education and Human Resources  
 Division of Information & Intelligent Systems  
 Division of Social, Behavioral, and  
 Economic Sciences  
 National Center for Supercomputing Applications  
 Blue Waters Supercomputer Allocations  
 Delta Supercomputer Allocations  
 Faculty Fellows Program  
 The Netherlands Organisation for Scientific  
 Research  
 Oxford University Press  
 Parallel and Distributed Algorithms for  
 Decision Sciences (PDADS) Conference  
 Peter Lang Publishing  
 Platform for Advanced Scientific Computing  
 (PASC) Conference  
 Polity Press  
 Rowman & Littlefield Publishers  
 Russell Sage Foundation  
 SAGE Publishing  
 Time-Sharing Experiments for the Social Sciences  
 University of Illinois Research Board  
 Wiener Wissenschafts-, Forschungs- und  
 Technologiefonds