Andee Kaplan

CONTACT INFORMATION	Department of Statistics	*E-mail:* andee.kaplan@colostate.edu
	Colorado State University	*WWW:* https://andeekaplan.com
	Fort Collins, CO 80523-1877	ORCID: 0000-0002-2940-889X

PROFESSIONAL APPOINTMENTS

Colorado State University, Department of Statistics, Fort Collins, CO
Assistant Professor   August 2019 – Present

Duke University, Department of Statistical Science, Durham, NC
Postdoctoral Associate   August 2017 – July 2019

EDUCATION

Ph.D. in Statistics, Iowa State University, Ames, IA   2017
M.S. in Statistics, Iowa State University, Ames, IA   2014
M.A. in Mathematics, The University of Texas, Austin, TX   2010
B.S. in Mathematics, The University of Texas, Austin, TX   2006

RESEARCH INTERESTS

Bayesian Statistics, Computational Statistics, Record Linkage and Entity Resolution, Markov chain Monte Carlo, Spatial Resampling, Statistical Machine Learning, Interactive Statistical Graphics, Reproducible Research

HONORS AND AWARDS

National Science Foundation CAREER Award   2024
Titled "CAREER: Flexible Record Linkage through Realistic Modeling of Dependent, Missing, and Updating Data."

Selected for "The Best of JCGS – Invited Papers" Session at JSM   2019
"Designing Modular Software: A Case Study in Introductory Statistics" with E. Hare selected for inclusion in the session.

ISU Department of Statistics George W. Snedecor Award   2015
This award honors the founder and first director of the Statistical Laboratory, George W. Snedecor, and is awarded to the most outstanding PhD candidate in the Department of Statistics.

American Statistical Association Computing Section Student Paper Award   2015
Awarded for paper "Introductory statistics with intRo."

ISU Department of Statistics Holly and Beth Fryer Scholarship   2014
Criteria for this scholarship include grades received in Statistics and related courses, performance in assistantship duties and other information that indicates a high likelihood that the student will make contributions to the Statistics profession throughout their career.

Women in Statistics Conference Poster Award   2014
Awarded for poster "Mathematical Self-Efficacy of Incoming Students at a Large Public University."

American Statistical Association Data Exposition 1st Place   2013
Awarded for poster "Putting Down Roots: A Graphical Exploration of Community Attachment."

ISU Department of Statistics Vera David Fellowship   2013
This fellowship, is given to a female student who has just completed her first year of graduate studies. The scholarship is awarded on the basis of academic achievement during the student's first year.

OTHER AWARDS		
Theory and Foundations of Statistics in the Era of Big Data Conference Travel Award		2024
ISBA Bayes Comp Conference Travel Award		2020
IMS New Researchers Conference Travel Award		2018 & 2019
IMA Frontiers in Forecasting Travel Award		2018
Conference on Data Analysis Poster Grant		2016
rOpenSci Unconf Travel Funding		2015
Fields Institute Workshop on Visualization for Big Data Travel Award		2015
Women in Statistics Conference Travel Award		2014
ASA Joint Statistical Meetings Special Student Funding Travel Award		2014
NSF Research Experiences for Undergraduates		2006
University of Texas at Austin Honors and Dean's List		2005 & 2006

REFEREED JOURNAL PUBLICATIONS

* Denotes graduate student author, † denotes undergraduate student author.

[1] Taylor, I. [*], **Kaplan**, **A.**, and Betancourt, B. "Generative Filtering for Recursive Bayesian Inference with Streaming Data". *Journal of Computational and Graphical Statistics* 0.0 (2025), pp. 1–13.

[2] Chou, C. [†] and **Kaplan**, **A.** "The Fast and the Furious: Tracking the Effect of the Tomoa Skip on Speed Climbing". *Chance* 0.0 (2024), pp. 1–15.

[3] Koslovsky, M., **Kaplan**, **A.**, Terranova, V. A., and Hooten, M. "A Unified Bayesian Framework for Modeling Measurement Error in Multinomial Data". *Bayesian Analysis* 0.0 (2024), pp. 1–31.

[4] Biswas, E. [*], **Kaplan**, **A.**, Kaiser, M. S., and Nordman, D. J. "A formal goodness-of-fit test for spatial binary Markov random field models". *Biometrics* 80.4 (2024), pp. 1–26.

[5] Taylor, I. [*], **Kaplan**, **A.**, and Betancourt, B. "Fast Bayesian Record Linkage for Streaming Data Contexts". *Journal of Computational and Graphical Statistics* 33.3 (2024), pp. 833–844.

[6] **Kaplan**, **A.** and Bien, J. "Interactive Exploration of Large Dendrograms with Prototypes". *The American Statistician* 77.2 (2023), pp. 201–211.

[7] **Kaplan**, **A.**, Betancourt, B., and Steorts, R. C. "A Practical Approach to Proper Inference with Linked Data". *The American Statistician* 76.4 (2022), pp. 384–393.

[8] Lu, X. [*], Hooten, M., **Kaplan**, **A.**, Womble, J., and Bower, M. "Improving Wildlife Population Inference Using Aerial Imagery and Entity Resolution". *Journal of Agricultural, Biological and Environmental Statistics* 27.2 (2022), pp. 364–381.

[9] Keller, J. P., Zhou, T., **Kaplan**, **A.**, Anderson, G. B., and Zhou, W. "Tracking the transmission dynamics of COVID-19 with a time-varying coefficient state-space model". *Statistics in Medicine* 41.15 (2022), pp. 2745–2767.

[10] Marchant, N. [*], **Kaplan**, **A.**, Elazar, D. N., Rubinstein, B. I. P., and Steorts, R. C. "d-blink: Distributed End-to-End Bayesian Entity Resolution". *Journal of Computational and Graphical Statistics* 30.2 (2021), pp. 406–421.

[11] **Kaplan**, **A.**, Kaiser, M. S., Lahiri, S. N., and Nordman, D. J. "Simulating Markov Random Fields With a Conclique-Based Gibbs Sampler". *Journal of Computational and Graphical Statistics* 29.2 (2020), pp. 286–296.

[12] **Kaplan**, **A.**, Nordman, D. J., and Vardeman, S. "On the S-instability and degeneracy of discrete deep learning models". *Information and Inference: A Journal of the IMA* 9.3 (2020), pp. 627–655.

[13] **Kaplan**, **A.** and Hare, E. "Putting Down Roots: A Graphical Exploration of Community Attachment". *Computational Statistics* 34.4 (2019), pp. 1449–1464.

[14] **Kaplan**, **A.**, Nordman, D. J., and Vardeman, S. "Properties and Bayesian fitting of restricted Boltzmann machines". *Statistical Analysis and Data Mining: The ASA Data Science Journal* 12.1 (2019), pp. 23–38.

[15]   Hare, E. and **Kaplan, A.** "Designing Modular Software: A Case Study in Introductory Statistics". *Journal of Computational and Graphical Statistics* 26.3 (2017), pp. 493–500.

[16]   **Kaplan, A.**, Hofmann, H., and Nordman, D. J. "An interactive graphical method for community detection in network data". *Computational Statistics* 32.2 (2017), pp. 535–557.

[17]   **Kaplan, A.**, Hare, E., Hofmann, H., and Cook, D. "Can you buy a president? Politics after the Tillman Act". *Chance* 27.1 (2014), pp. 20–30.

PREPRINTS

[18]   Drew, L.[*], **Kaplan, A.**, and Breckheimer, I. "A Bayesian Record Linkage Approach to Applications in Tree Demography Using Overlapping LiDAR Scans". *Major Revision at AoAS* (2025+).

[19]   Lu, X., **Kaplan, A.**, Kanno, Y., Valentine, G., Rash, J., and Hooten, M. "Stochastic Spatial Stream Networks for Scalable Inferences of Riverscape Processes". *Major Revision at Spatial Statistics* (2025+).

[20]   Drew, L.[*] and **Kaplan, A.** "ldmppr: Location Dependent Marked Point Processes in R". *Submitted to Journal of Statistical Software* (2025+).

REFEREED
CONFERENCE
PRECEEDINGS

[21]   Mouzon, I., Genschel, U., Nguyen, X. H., **Kaplan, A.**, Carriquiry, A., and Mann, C. "A Cluster Analysis of STEM Gender Differences". *Proceedings of the 18th Annual Conference on Research in Undergraduate Mathematics Education.* The SIGMAA on Research in Undergraduate Mathematics Education. 2015, pp. 793–800.

UNREFEREED
CONFERENCE
PRECEEDINGS

[22]   Hofmann, H., Cook, D., **Kaplan, A.**, Hare, E., Leos-Barajas, V., Sievert, C., and Tyner, S. "On the move at DinoFun world". *Visual Analytics Science and Technology (VAST), 2015 IEEE Conference on.* IEEE. 2015, pp. 159–160.

[23]   Hofmann, H., Cook, D., **Kaplan, A.**, Hare, E., Leos-Barajas, V., Sievert, C., and Tyner, S. "Visualizing communication patterns at DinoFun World". *Visual Analytics Science and Technology (VAST), 2015 IEEE Conference on.* IEEE. 2015, pp. 161–162.

[24]   Genschel, U., **Kaplan, A.**, Carriquiry, A., Johnston, E., Kliemann, W., Koehler, K., Mouzon, I., and Nguyen, H. "Statistical and Mathematical Self-Efficacy of Incoming Students at a Large Public University". *Sustainability in Statistics Education, Proceedings of the Ninth International Conference on Teaching Statistics (ICOTS9), Flagstaff, Arizona, USA.* 2014.

GRANTS &
CONTRACTS

As PI: *Scalable Entity Resolution for Massive and Streaming Data Contexts* (NSF DMS-2330089) PI: Kaplan ($150,000). September 2024 - August 2027.

As PI: *CAREER: Flexible Record Linkage through Realistic Modeling of Dependent, Missing, and Updating Data* (NSF SES-2338428) PI: Kaplan ($550,002). May 2024 - April 2029.

As PI: *EnviBayes Workshop on Complex Environmental Data* (NSF DMS-2327107) PI: Kaplan ($20,000). September 2023 - August 2024.

As PI: *Faculty and Staff Success Initiative Grant* (CSU CNS) PI: Kaplan ($5,000). Summer 2023.

As PI: *Online Bayesian Learning for Streaming Entity Resolution* (DoD via North Carolina State University Laboratory for Analytic Sciences). PI: Kaplan and Brenda Betancourt (CSU: $56,411). January 2022 - August 2022.

As PI: *Streaming Record Linkage for Online Data Deduplication* (DoD via North Carolina State University Laboratory for Analytic Sciences). PI: Kaplan and Brenda Betancourt ($130,352; CSU: $90,624). January 2021 - December 2021.

As PI: *Streaming Record Linkage for Online Data Deduplication* (DoD via North Carolina State University Laboratory for Analytic Sciences). PI: Kaplan and Brenda Betancourt ($132,398; CSU: $92,033). January 2020 - December 2020.

As PI: *An Extensible Model for Deduplication of the GDELT Events Database* (DoD via North Carolina State University Laboratory for Analytic Sciences). PI: Kaplan ($23,996). August 2019 - December 2019.

As Co-PI: *Posterior Prototyping: Bridging the Gap between Record Linkage and Regression* (DoD via North Carolina State University Laboratory for Analytic Sciences). PI: Brenda Betancourt and Rebecca C. Steorts ($96,897). January 2019 - December 2019.

UNFUNDED GRANTS & CONTRACTS

As Co-PI: *Integrating social science and environmental data analysis to address humanitarian injustices within the U.S. prison system* (CSU SoGES GCRT) PI: Caitlin Mothes, Carrie Chennault, Kaplan, Mindy Hill ($60,000). July 2024 - May 2026.

As Co-PI: *Racial Capitalism and the Unsustainable Sustainability of US Prison Agriculture* (CSU SoGES GCRT) PI: Carrie Chennault, Matthew Ross, Joshua Sbicca, Kaplan ($30,000). July 2022 - May 2024.

As Co-PI: *A Statistical and Data Science Toolkit for Modeling Transmission and Inferring Disease Spread* (CSU OVPR) PI: Josh Keller ($200,000). October 2021 - September 2023.

As PI: *Collaborative Research: Understanding Instability in Deep Learning Models to Unlock Scalable Bayesian Inference with Application to Microbiome Data* (NSF) PI: Kaplan and Claudia Solís-Lemus ($1,127,383; CSU: $519,877). November 2021 - October 2024.

As Co-PI: *HDR Institute: Geometric Understanding of Data and Machine Learning Models to Unravel Connections Between Health, Aging and Environment* (NSF) PI: Michael J. Kirby ($17,041,305). September 2021 - August 2026.

As Co-PI: *BII: The Ecological Consequences Of Disrupting the Environmental clock (ECODE)* (NSF) PI: Aimé Classen, Ecosystem Ecology ($12,500,000). September 2021 - August 2026.

SOFTWARE

[1] Drew, L. [*] and **Kaplan**, **A.** *ldmppr: Estimate and Simulate from Location Dependent Marked Point Processes*. R package version 1.0.3. 2024. [Over 700 downloads].

[2] Taylor, I. [*], **Kaplan**, **A.**, and Betancourt, B. *bstrl: Bayesian Streaming Record Linkage*. R package version 0.1.0. 2022. [Over 6,000 downloads].

[3] **Kaplan**, **A.** and Bien, J. *protoshiny: Interactive dendrograms for Visualizing Hierarchical Clusters with Prototypes*. R package version 0.1.0. 2022. [Over 4,000 downloads].

[4] **Kaplan**, **A.**, Betancourt, B., and Steorts, R. C. *representr: Create Representative Records After Entity Resolution*. R package version 0.1.4. 2022. [Over 14,000 downloads].

[5] Marchant, N. [*], Steorts, R. C., and **Kaplan**, **A.** *dblink: Distributed End-to-End Bayesian Entity Resolution*. Scala package version 0.2.0. 2020.

[6] Steorts, R., **Kaplan**, **A.**, and Sunil, S. [†]. *cd: CD Data for Entity Resolution*. R package version 0.1.0. 2020. [Over 16,000 downloads].

[7] Steorts, R., **Kaplan**, **A.**, and Sunil, S. [†]. *cora: Cora Data for Entity Resolution*. R package version 0.1.0. 2020. [Over 14,000 downloads].

[8] Steorts, R., **Kaplan**, **A.**, and Sunil, S. [†]. *restaurant: Restaurant Data for Entity Resolution*. R package version 0.1.0. 2020. [Over 14,000 downloads].

[9] **Kaplan**, **A.** and Nordman, D. *conclique: Gibbs Sampling for Spatial Data and Concliques*. R package version 0.1.0. 2017.

[10] Hare, E. and **Kaplan**, **A.** *intRo: Download and Run the intRo Statistical Software*. R package version 0.1. 2017.

[11] **Kaplan**, **A.** *forestr: Random Forests with a User Created Splitting Criterion*. R package version 0.0.0.9000. 2015.

Invited Talks

[1] "A Bayesian Record Linkage Approach to Tree Demography Using Overlapping LiDAR Scans". *WNAR/IMS Annual Meeting*. Invited Paper. WNAR. Whistler, BC, CA, June 2025 (Upcoming).

[2] "Fast Bayesian Record Linkage for Streaming Data Contexts". *Frontiers in Data Science Symposium: Advances in Record Linkage*. Invited Talk. Data Driven Social Science Initiative at Princeton University. Princeton, New Jersey, Oct. 2024.

[3] "An Improved MCMC Sampler for Streaming Bayesian Inference". *WNAR/IMS Annual Meeting*. Invited Paper. WNAR. Fort Collins, CO, USA, June 2024.

[4] "Generative Filtering for Recursive Bayesian Inference with Streaming Data". *Theory and Foundations of Statistics in the Era of Big Data*. Invited Talk. International Indian Statistical Association. Tallahassee, FL, USA, Apr. 2024.

[5] "Improved Recursive Bayesian Inference with Streaming Data". *75th Anniversary Research Conference*. Invited Talk. Iowa State University Department of Statistics. Ames, IA, USA, Oct. 2023.

[6] "Improving Bayesian inference with streaming data". *EnviBayes Workshop on Complex Environmental Data*. Invited Talk. ISBA. Fort Collins, CO, USA, Sept. 2023.

[7] "Understanding Tree Demography Using Overlapping Lidar Scans and Spatial Entity Resolution". *WNAR/IMS Annual Meeting*. Invited Paper. WNAR. Anchorage, AK, USA, June 2023.

[8] "A Hierarchical Bayesian Entity Resolution Model to Improve Tree Demography Using Overlapping Lidar Scans". *IISA Annual Conference*. Invited Paper. IISA. Golden, CO, USA, June 2023.

[9] "Fast Bayesian Record Linkage for Streaming Data Contexts". *14th International Conference of the ERCIM WG on Computational and Methodological Statistics*. Organized Invited Session. European Research Consortium for Informatics and Mathematics. London, UK (Remote via Zoom), Dec. 2022.

[10] "Fast Bayesian Record Linkage for Streaming Data". *Record Linkage Interest Group of the ASA Seminar*. Georgetown University, Massive Data Institute. Washington, D.C., USA (Remote via Zoom), July 2022.

[11] "Exploring Interactive Dendrograms with Prototypes". *Invited Talk*. Iowa State University, Graphics Group. Ames, IA, USA (Remote via Zoom), Nov. 2020.

[12] "Bayesian Canonicalization of Voter Registration Files". *Symposium on Data Science and Statistics*. Invited Session. ASA. Pittsburgh, PA, USA (Remote via Zoom), June 2020.

[13] "Life after record linkage: Tackling the downstream task with error propagation". *Bayes Comp*. Invited Session. ISBA. Gainesville, FL, USA, Jan. 2020.

[14] "Posterior Prototyping for Bayesian Entity Resolution". *12th International Conference of the ERCIM WG on Computational and Methodological Statistics*. Organized Invited Session. European Research Consortium for Informatics and Mathematics. London, UK, Dec. 2019.

[15] "Designing Modular Software: a Case Study in Introductory Statistics". *Joint Statistical Meetings*. Invited Session. ASA. Denver, CO, USA, July 2019.

[16] "A Fast Sampler for Data Simulation from Markov Random Fields". *Invited Session*. The 28th Annual Conference of the International Envirometrics Society. Guanajuato, Gto., Mexico, July 2018.

[17] "Model matters with restricted Boltzmann Machines". *Keynote*. The 1st Midwest Statistical Machine Learning Colloquium. Ames, IA, USA, May 2018.

[18] "Goodness-of-Fit Tests for Spatial Markov Random Fields". *8th International Conference of the ERCIM WG on Computational and Methodological Statistics*. Organized Invited Session. European Research Consortium for Informatics and Mathematics. London, UK, Dec. 2015.

[19] "Putting Down Roots: A Graphical Exploration of Community Attachment". *Census Data Visualization Seminar*. U.S. Census Bureau. Washington, D.C., USA, Sept. 2013.

DEPARTMENTAL SEMINARS

[1] University of Nebraska – Lincoln, Department of Statistics. Lincoln, NE, USA, Apr. 2025 (Upcoming).

[2] University of South Carolina, Department of Statistics. Columbia, SC, USA, Nov. 2024.

[3] Clemson University, School of Mathematical and Statistical Sciences. Clemson, SC, USA, Nov. 2024.

[4] University of California Santa Cruz, Department of Statistics. Santa Cruz, CA (Remote via Zoom), Mar. 2023.

[5] Dalhousie University, Department of Statistics. Halifax, NS, Canada (Remote via Zoom), Mar. 2023.

[6] Colorado School of Public Health, Department of Biostatistics and Informatics. Denver, CO, Oct. 2022.

[7] Colorado School of Mines, Department of Applied Mathematics and Statistics. Golden, CO, Apr. 2022.

[8] McGill University, Department of Biostatistics. Montreal, QC, Canada (Remote via Zoom), Mar. 2022.

[9] University of Iowa, Department of Statistics and Actuarial Science. Iowa City, IA, USA (Remote via Zoom), Sept. 2021.

[10] University of Toronto, Department of Statistics. Toronto, ON, Canada (Remote via Zoom), Nov. 2020.

[11] New York University, Center for Practice, Research at the Intersection of Information, Society, and Methodology. New York, NY, USA (Remote via Zoom), Oct. 2020.

[12] The University of Wisconsin, Systems, Information, Learning and Optimization (SILO) Research Group. Madison, WI, USA, Nov. 2019.

[13] Duke University, Department of Computer Science. Durham, NC, USA, Apr. 2019.

[14] The University of California Irvine, Department of Statistics. Irvine, CA, USA, Feb. 2019.

[15] The University of Kentucky, Department of Statistics. Lexington, KY, USA, Feb. 2019.

[16] The Pennsylvania State University, Department of Statistics. State College, PA, USA, Feb. 2019.

[17] Virginia Tech University, Department of Statistics. Blacksburg, VA, USA, Feb. 2019.

[18] The University of Wisconsin, Department of Statistics. Madison, WI, USA, Feb. 2019.

[19] Colorado State University, Department of Statistics. Fort Collins, CO, USA, Jan. 2019.

[20] The University of Texas at Austin, Department of Statistics and Data Science. Austin, TX, USA, Jan. 2019.

[21] Stanford University, Department of Statistics. Stanford, CA, USA, Jan. 2019.

[22] Monash University, Department of Econometrics and Business Statistics. Melbourne, VIC, Australia, Jan. 2019.

[23] Texas A&M University, Department of Statistics. College Station, TX, USA, Nov. 2018.

[24] North Carolina State University, Department of Statistics. Raleigh, NC, USA, Oct. 2018.

[25] Iowa State University, Department of Statistics. Ames, IA, USA, Jan. 2018.

[26] North Carolina State University, Department of Statistics. Raleigh, NC, USA, Nov. 2017.

[27] Centro de Investigación en Matemáticas. Guanajuato, Gto., Mexico, Oct. 2017.

[28] Duke University, Department of Statistical Science. Durham, NC, USA, Apr. 2017.

[29] Michigan State University, Department of Statistics and Probability. East Lansing, MI, USA, Feb. 2017.

[30] University of Illinois, Urbana-Champaign, Department of Statistics. Chapaign, IL, USA, Feb. 2017.

[31] University of Florida, Department of Statistics. Gainesville, FL, USA, Feb. 2017.

[32] Rice University, Department of Statistics. Houston, TX, USA, Jan. 2017.

[33] University of Virginia, Department of Statistics. Charlottesville, VA, USA, Jan. 2017.

[34] Arizona State University, School of Mathematical and Statistical Sciences. Tempe, AZ, USA, Jan. 2017.

[35] University of Massachussetts, Amherst, Department of Mathematics & Statistics. Amherst, MA, USA, Dec. 2016.

[36] Iowa State University, Department of Statistics. Ames, IA, USA, Jan. 2015.

INVITED SHORT COURSES

Some of Record Linkage, Full-Day Workshop
Co-instructor

US Census Bureau	May 2018
Centro de Investigación de Matemáticas, A. C.	February 2018

Machine Learning Day, Full-Day Event
Co-organizer

Duke University	March 2018

D3 Workshop, Half-Day Workshop
Co-instructor

NORC at the University of Chicago	October 2015

Week of R, Week-Long Workshop
Co-instructor

Iowa State University	June 2013, 2014, 2015

CONTRIBUTED TALKS

[1] "An improved sampler for recursive Bayesian inference". *Joint Statistical Meetings*. Topic Contributed Paper. ASA. Nashville, TN, USA, Aug. 2025 (Upcoming).

[2] "Scaling Record Linkage to Streaming Data Contexts". *Joint Statistical Meetings*. Topic Contributed Paper. ASA. Portland, OR, USA, Aug. 2024.

[3] "An improved sampler for recursive Bayesian inference". *Joint Statistical Meetings*. Topic Contributed Paper. ASA. Toronto, ON, Canada, Aug. 2023.

[4] "Counting Casualties in the Syrian Civil War with Bayesian Record Linkage". *Joint Statistical Meetings*. Topic Contributed Paper. ASA. Vancouver, BC, Canada, July 2018.

[5]   "Population Sized Graphical Record Linkage". *ISBA World Meeting*. Contributed Member Paper. ISBA. Edinburgh, UK, June 2018.

[6]   "A Simple, Fast Sampler for Simulating Spatial Data and Other Markovian Data Structures". *Joint Statistical Meetings*. Contributed Paper. ASA. Baltimore, MD, USA, Aug. 2017.

[7]   "An exposition on the propriety of restricted Boltzmann machines". *Joint Statistical Meetings*. Contributed Paper. ASA. Chicago, IL, USA, July 2016.

[8]   "Introducing Statistics with intRo". *The R User Conference*. Contributed Paper. Stanford, CA, USA, June 2016.

[9]   "Introducing Statistics with intRo". *Joint Statistical Meetings*. Topic Contributed Paper. ASA. Seattle, WA, USA, Aug. 2015.

[10]   "gravicom - A web-based tool for community detection in networks". *Joint Statistical Meetings*. Contributed Paper. ASA. Boston, MA, USA, Aug. 2014.

POSTERS

[1]   "A Bayesian Entity Resolution Approach to Tree Demography Using Overlapping Lidar Scans". *Joint Statistical Meetings*. Invited Poster. ASA. Toronto, ON, Canada, Aug. 2023.

[2]   "Life After Record Linkage: Tackling the Downstream Task with Error Propagation". *New Researchers Conference*. Contributed Poster. Institute of Mathematical Statistics. Fort Collins, CO, USA, July 2019.

[3]   "Population Sized Record Linkage". *New Researchers Conference*. Contributed Poster. Institute of Mathematical Statistics. Vancouver, BC, Canada, July 2018.

[4]   "Properties and Bayesian fitting of restricted Boltzmann machines". *Frontiers in Forecasting*. Contributed Poster. Institute for Mathematics and its Application, University of Minnesota. Minneapolis, MN, USA, Feb. 2018.

[5]   "An Exposition on the Propriety of Restricted Boltzmann Machines". *Conference on Data Analysis*. Contributed Poster. Los Alamos National Laboratory. Santa Fe, NM, USA, Mar. 2016.

[6]   "Visualizing Linked Data Sources for the National Children's Study". *Conference on Statistical Practice*. Contributed Poster. ASA. San Diego, CA, USA, Feb. 2016.

[7]   "Mathematical Self-Efficacy of Incoming Students at a Large Public University". *Women in Statistics Conference*. Student Poster. ASA. Cary, NC, USA, May 2014.

[8]   "Putting Down Roots: A Graphical Exploration of Community Attachment". *Joint Statistical Meetings*. Data Exposition Poster. ASA. Montreal, QC, Canada, Aug. 2013.

[9]   "Can you buy a president? Politics after the Tillman Act". *Joint Statistical Meetings*. Contributed Poster. ASA. Montreal, QC, Canada, Aug. 2013.

TEACHING EXPERIENCE

*Denotes courses developed.

CSU	STAT 630	Advanced Statistical Data Analysis	F23, F24
CSU	STAA 577	Statistical Learning and Data Mining	S23, F23, S24, F24, S25
CSU	DSCI 445*	Statistical Machine Learning	F20, F21, F22, F23, F24
CSU	STAT 730	Advanced Theory of Statistics I	S20
CSU	STAT 400	Statistical Computing	F19, F20, F21, F22
ISU	STAT 305	Engineering Statistics	S17, SU17
ISU	AGRON 590DS*	Data Stewardship for Earth Systems Scientists	F16
ISU	STAT 226	Introduction to Business Statistics	S13

MENTORSHIP	*Graduate Students*	
	Hyungjoon Kim, PhD Advisor (Co-advisor: Matt Koslovsky)	Spring 2027 (Anticipated)
	Hannah Butler, PhD Advisor	Spring 2026 (Anticipated)
	Lane Drew, PhD Advisor	Summer 2025 (Anticipated)
	Ian Taylor, PhD Advisor (Co-advisor: Bailey Fosdick)	Fall 2023
	Emily Gross (HDNR), PhD Committee Member,	Spring 2027 (Anticipated)
	Daniel Tedeschi (Math), MS and PhD Committee Member,	Spring 2027 (Anticipated)
	Mason Faldet (Math), PhD Committee Member,	Spring 2027 (Anticipated)
	Yao Zheng, PhD Committee Member,	Spring 2026 (Anticipated)
	Wilson Wright, PhD Committee Member,	Summer 2024
	Justin Van Ee, PhD Committee Member	Summer 2023
	Connor Gibbs, PhD Committee Member,	Spring 2023
	Alex Fout, PhD Committee Member	Summer 2022
	Xinyi (Lucy) Lu, PhD Committee Member	Summer 2021
	Casey Schafer, GRA	Fall 2019

Undergraduate Students

	Caleb Chou (Colorado State University), Undergraduate Research	Summer 2023
	Ryan Volkert (Colorado State University), Undergraduate Research	Spring 2021
	Olivia Beck (Colorado State University), Honors Thesis Committee Member	Fall 2019
	Ritika Bharati (Duke University), Undergraduate Research	Spring 2018 - Spring 2019
	Srini Sunil (Duke University), Undergraduate Research	Fall 2017 - Spring 2019

INDUSTRY
EXPERIENCE

NORC at the University of Chicago, Chicago, Illinois USA

Graduate Research Assistant   May, 2015 - August, 2015

Summer internship with Statistics and Methodology Department. Primarily developed web-based interactive graphics using JavaScript library D3 to explore data linkage for extant sources.

Banks Information Group, Austin, Texas USA

Independent Contractor   July, 2011 - July, 2012

Developed web-based environmental GIS reporting tool for Phase I reporting, developed and implemented a web-based tool to convert images to PDF files programatically, utilizing ESRI ArcSDE, .NET/C#, and Microsoft SQL Server.

Sense Corp, Austin, Texas USA

Consultant   July, 2009 - July, 2011

Designed monthly subscriber activity forecasts across key markets at a top-five broadband telecommunications company using ARIMA time series modeling in R. Developed an automated and custom web application for Business Intelligence Group to forecast and analyze long-term trends.

Gelb Consulting Group, Houston, Texas USA

Intern Analyst   June, 2008 - August, 2008

Internal consultant focusing on revising several standard operating procedures, including regression and factor analysis.

SERVICE AND
LEADERSHIP

Colorado State University

Departmental Service

Computing Committee, Chair	2024-25
Search Committee	2020-21, 2021-22, 2024-25
Graduate Admissions Committee	2020-21, 2022-23, 2023-24, 2024-25
Diversity, Equity and Inclusion Committee	2023-24

Undergraduate Committee	2022-23
Data Science Committee	2019-20, 2020-21
Statistical Learning and Data Science Journal Club Co-organizer	2020
Seminar Co-organizer	2019-20

University Service

oSTEM Faculty Advisory Team	Fall 2024 - Present
Data Science Research Institute Steering Committee	Fall 2020 - Present

Service to the Profession

Office in Professional Societies

Program Chair ISBA EnviBayes Section	2025-26
Secretary/Treasurer ASA Bayesian Statistical Science Section	2025-26

Associate Editor

Journal of Computational and Graphical Statistics	January 2024 - Present
Technometrics	January 2022 - Present

Reviewer

AIStats, American Political Science Review, ASA SBSS Student Paper Competition, Annals of Applied Statistics, Applied Stochastic Models in Business and Industry, Bayesian Analysis, Computational Statistics & Data Analysis, Environmental and Ecological Statistics, Journal of the American Statistical Association, Journal of Computational and Graphical Statistics, Journal of the Royal Statistical Society, Section A, Journal of Statistical Planning and Inference, Journal of Survey Statistics and Methodology, PLOS One, Statistics and Probability Letters, Statistics and Public Policy, Statistical Science, Survey Methodology, The American Statistician

NSF DMS Panelist (DMS) $\times 2$

Chair of Conference Organizing Committee

EnviBayes Workshop on Complex Environmental Data, Fort Collins, CO, USA	September 2023

Other Conferences

Invited Session Organizer, WNAR, Whistler, BC, CA	June 2025 (Upcoming)
Invited Session Organizer, WNAR, Anchorage, AK, USA	June 2023
Local Organizing Committee Member, IISA International Conference, Golden, CO, USA	June 2023
Co-organizer, Symposium for Data Science & Statistics, Pittsburgh, PA, USA	June 2020
Invited Session Chair, JSM, Denver, CO, USA	August 2019
Contributed Session Organizer, JSM, Vancouver, BC, Canada	August 2018

Statistics in the Community (StatCom)

Network Outreach Coordinator	2015 - 2017
Executive Committee, ISU Chapter	2013 - 2017

Iowa State University

Student representative to departmental faculty meetings	2015 - 2017
STATers, social organization for graduate students, Vice President	2013 - 2014
Graduate and Professional Student Senate, Senator	2012 - 2013

COMPUTING
- Mathematical and Statistical Computing: R, Rcpp, Shiny, Julia, STAN, JAGS, SAS, Matlab; some experience with Python and SPSS.
- Other Languages: C++, JavaScript (and D3), Java, SQL, C#, .NET, HTML5, CSS3, Markdown.
- Content Management: Git