

Amanda R. Kube Jotte, MS, PhD

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Academic Appointments

University of Chicago 2024–Present
Assistant Instructional Professor of Statistics and Data Science, Data Science Institute

University of Chicago 2022–2024
Preceptor in Data Science, Data Science Institute

Education

Washington University in St. Louis 2018–2022
Ph.D., Computational and Data Sciences
Dissertation: Data-Driven Decision-Making: Using Counterfactual Predictions to Allocate Scarce Homeless Services Fairly and Efficiently
Advised by Sanmay Das and Patrick Fowler
Defended April 2022

Washington University in St. Louis 2017–2018
M.S., Data Analytics and Statistics
Thesis: Allocating Interventions Based on Counterfactual Predictions: A Case Study on Homelessness Services
Advised by Sanmay Das
Defended April 2018

Washington University in St. Louis 2013–2017
B.A., Double Major in Psychological and Brain Sciences and Mathematics (Statistics)
Minor in Children's Studies
Summa Cum Laude and Phi Beta Kappa
Thesis: Training Self-Control? A Meta-Analysis
Advised by Joshua Jackson

Honors and Awards

2025 - Pedagogy Fellow - Chicago Center for Teaching and Learning
2021 - University of Chicago Rising Star in Data Science
2021 - Teaching Citation, Washington University in St. Louis
2018 - Dean's Select Fellowship
2018 - Summa Cum Laude
2017 - Phi Beta Kappa

Grants and Funded Projects

– **Physical Sciences Collegiate Division Curricular Innovation Award**, University of Chicago (Co-PI), Winter 2025. Competitive internal funding supporting the development of interactive, self-grading laboratory materials for undergraduate data science courses.

Teaching Experience

Instructor of Record
– *University of Chicago*
– **DATA 120** Computer Science for Data Science – Spring 2026, Winter 2026, Spring 2025

- **DATA 259** Ethics, Fairness, Responsibility, and Privacy in Data Science – Spring 2026, Autumn 2025, Autumn 2024
- **DATA 119** Introduction to Data Science II – Spring 2026, Spring 2025, Winter 2025, Winter 2024 (2 sections)
- **DATA 221** Introduction to Machine Learning: Concepts and Applications – Winter 2026, Autumn 2025, Winter 2025
- **DATA 118** Introduction to Data Science I – Winter 2023, Autumn 2023 (2 sections)
- *Harry S. Truman College*
 - **CIS 299** Special Topics: Introduction to Data Science II – Spring 2024
 - **CIS 299** Special Topics: Introduction to Data Science I – Spring 2023
- *Washington University in St. Louis*
 - **DCDS 510** Data Wrangling – Spring 2021
 - **DCDS 499** Introduction to Graduate Research in Computational and Data Sciences – Fall 2020

Teaching Assistant

- *Washington University in St. Louis*
 - **CSE 417T** Introduction to Machine Learning – Spring 2019
 - **CSE 131** Introduction to Computer Science – Spring 2016, Fall 2017

Curriculum Development

- Development of shared curriculum, assessments, and autograders for DATA 118, 119, 120, 221, and 259
- Design and maintenance of interactive, self-grading labs for DATA 118, 119, and 120
- Lead editor and contributor to *The Chicago Guide to Data Science*, an open-access instructional textbook used in DATA 118 and 119

Mentorship and Advising

- Graduate student research mentorship:
 - **Atticus Ginsborg** (M.S. in Data Science, 2025), now in an analytics role with the Chicago Cubs.
- Mentorship and instructional guidance for Data Science Preceptors (2025–Present)

Institutional Service

- **University of Chicago, Data Science Institute**
 - Data Science and SkAI Preceptor Program administration and mentorship (2025–Present).
<https://datascience.uchicago.edu/outreach/preceptors/>
<https://skai-institute.org/programs/skai-postdoctoral-preceptors-program/>
 - Preceptor Search Committee, Data Science Institute (2024–2025, 2025–2026)
 - SkAI Preceptor Search Committee, Data Science Institute (2024–2025, 2025–2026)
 - Master’s in Data Science (MSDS) Admissions Committee, Data Science Institute (2024–2025)

Books and Book Chapters

- [1] Nicolae, D. L., Franklin, M. J., **Jotte, A. R. K.** (Eds.). *The Chicago Guide to Data Science*. 2025. University of Chicago Data Science Institute. Online open-access textbook. Available at: <https://ds1.datascience.uchicago.edu/>.
- [2] **Jotte, A. R. K.** and Lange, S. (2025). Programming in Python. In D. L. Nicolae, M. J. Franklin, & A. R. K. Jotte (Eds.), *The Chicago Guide to Data Science*. University of Chicago Data Science Institute. Available at: <https://ds1.datascience.uchicago.edu/03/programming-in-python.html>.
- [3] **Jotte, A. R. K.**, London, J., & Trimble, W. (2025). Collections of Data. In D. L. Nicolae, M. J. Franklin, & A. R. K. Jotte (Eds.), *The Chicago Guide to Data Science*. University of Chicago Data Science Institute. Available at: <https://ds1.datascience.uchicago.edu/04/DataStructures.html>.

- [4] **Jotte, A. R. K.** (2025). Data Collection. In D. L. Nicolae, M. J. Franklin, & A. R. K. Jotte (Eds.), *The Chicago Guide to Data Science*. University of Chicago Data Science Institute. Available at: <https://ds1.datascience.uchicago.edu/09/data-collection.html>.
- [5] **Jotte, A. R. K.** and Lange, S. (2025). Empirical and Probability Distributions. In D. L. Nicolae, M. J. Franklin, & A. R. K. Jotte (Eds.), *The Chicago Guide to Data Science*. University of Chicago Data Science Institute. Available at: <https://ds1.datascience.uchicago.edu/11/empirical-distributions.html>.
- [6] **Jotte, A. R. K.** (2025). Traffic Stops Case Study. In D. L. Nicolae, M. J. Franklin, & A. R. K. Jotte (Eds.), *The Chicago Guide to Data Science*. University of Chicago Data Science Institute. Available at: https://ds1.datascience.uchicago.edu/15/traffic_stops.html.

Journal Publications

- [7] Kaufmann, R., Harris, Bozer A., **Jotte, A. R. K.**, Aqua, K., (2023) The Effects of Long-Term Self-Dosing of Cannabidiol on Drowsiness, Testosterone Levels, and Liver Function. *Medical Cannabis and Cannabinoids* 6(1), 32-40.
- [8] **Kube, A. R.**, Das, S., Fowler, P. J. (2023). Community-and Data-Driven Homelessness Prevention and Service Delivery: Optimizing for Equity. *Journal of the American Medical Informatics Association* 30(6), 32-40.
- [9] **Kube, A.**, Das, S., Fowler, P. J. (2023). Fair and Efficient Allocation of Scarce Resources Based on Predicted Outcomes: Implications for Homeless Service Delivery. *Journal of Artificial Intelligence Research* 76, 1219-1244.
- [10] Cheung, F., **Kube, A.**, Tay, L. et al. (2020). The impact of the Syrian conflict on population well-being. *Nature Communications*, 11(1), 1-10.
- [11] Hill, P. L., Cheung, F., **Kube, A.**, Burrow, A. L. (2019). Life engagement is associated with higher GDP among societies. *Journal of Research in Personality*, 78, 210-214.

Refereed Conference Publications

- [12] **Kube, A.**, Das, S., Fowler, P. J., Vorobeychik, Y. (2022). Just Resource Allocation? How Algorithmic Predictions and Human Notions of Justice Interact. In *Proceedings of the 23rd ACM Conference on Economics and Computation*, 1184-1242.
- [13] **Kube, A.**, Das, S., Fowler, P. J. (2019). Allocating Interventions Based on Predicted Outcomes: A Case Study on Homelessness Services. *Proceedings of the AAAI Conference on Artificial Intelligence*, 33(1), 622-629.

Clinical Trials - Lead Statistical Investigator

- [14] *Comparison of Growth and Tolerance of Healthy Term Infants Fed Iron-Fortified Infant Formulas*. Registered clinical trial, ClinicalTrials.gov Identifier: NCT05947084. Sponsor: Aussie Bubs, Inc.
- [15] *Clinical Study of a Vaginal Cooling Device for the Treatment of Vulvovaginal Candidiasis (VVC)*. Registered clinical trial, ClinicalTrials.gov Identifier: NCT06983041. Sponsor: Coologics, Inc.

Working Papers and Works in Progress

- [16] **Jotte, A. R. K.**, Nussbaum, A., and Ginsborg, A. (under review) Beyond the Code: Supporting Beginners with Interactive Data Science Labs. Manuscript submitted to International Conference of the Learning Sciences (ICLS 2026). Co-authored with graduate student.
- [17] Sehgal K. and **Jotte, A. R. K.** (in preparation). Prediction and The Data Science Pipeline. In D. L. Nicolae, M. J. Franklin, & A. R. K. Jotte (Eds.), *The Chicago Guide to Data Science*. University of Chicago Data Science Institute. Draft available at: <https://textbook-datascience-1-dev.vercel.app/16/Intro.html>.
- [18] **Jotte, A. R. K.** (in preparation). Unsupervised Learning and Clustering. In D. L. Nicolae, M. J. Franklin, & A. R. K. Jotte (Eds.), *The Chicago Guide to Data Science*. University of Chicago Data Science Institute. Draft available at: https://textbook-datascience-1-dev.vercel.app/25/unsupervised_learning.html.

Presentations

- 2024 The Data Science Intro Sequence at UChicago. Oral presentation as part of the 2024 National Workshop on Data Science Education, Berkeley, CA
- 2023 Perspectives on Inclusive Teaching in Introductory Data Science: Best Practices for University and Community College Students. Moderated Discussion as part of the 2023 Academic Data Science Alliance Annual Meeting, San Antonio, TX
- 2023 The Human Element of Data Science: How to Teach Data Science Ethics. Moderated Discussion as part of the 2023 Academic Data Science Alliance Annual Meeting, San Antonio, TX
- 2022 Just Resource Allocation? How Algorithmic Predictions and Human Notions of Justice Interact. Oral presentation as part of the 2022 INFORMS Annual Meeting, Indianapolis, IN
- 2022 Just Resource Allocation? How Algorithmic Predictions and Human Notions of Justice Interact. Oral presentation as part of the 23rd ACM Conference on Economics and Computation, Boulder, CO
- 2021 Integrating human priorities and data-driven improvements in allocation of scarce homeless services to households in need. Oral presentation as part of the University of Chicago Center for Data and Computing Rising Stars in Data Science Workshop, Chicago, IL
- 2021 Homeless Service Allocation Under Differing Treatment Effect Heterogeneity. Oral presentation as part of the Canadian Operations Research Society Annual Conference, Toronto, Canada
- 2019 Precision Public Health: Homelessness Prevention Systems. Poster presentation as part of the 12th Washington University in St. Louis Institute for Public Health Conference, St. Louis, MO.
- 2019 Allocating Interventions Based on Predicted Outcomes: A Case Study on Homelessness Services. Oral presentation as part of the 32nd AAAI Conference Artificial Intelligence, Honolulu, HI.
- 2018 Allocating Interventions Based on Counterfactual Predictions: A Case Study on Homelessness Services. Oral presentation as part of the Mechanism Design for Social Good Workshop at the 19th ACM Conference on Economics and Computation, Ithaca, NY.

Service to the Profession

Requested Reviewer:

American Journal of Preventative Medicine (AJPM): Oct. 2023, Nov. 2024

Program Committee Member:

AAAI/ACM Conference on Artificial Intelligence, Ethics, and Society (AIES): 2023, 2024, 2025

ACM Conference on Equity and Access in Algorithms, Mechanisms, and Optimization (EAAMO): 2022

AAMAS Workshop on Autonomous Agents for Social Good (AASG): 2021, 2023, 2024, 2025

AAAI Symposium on Educational Advances in Artificial Intelligence (EAAI): 2020, 2022, 2023, 2026

Updated: January 30, 2026