# 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

2021 - University of Chicago Rising Star in Data Science
2021 - Teaching Citation
2018 - Dean's Select Fellowship
2018 - Summa Cum Laude
2017 - Phi Beta Kappa

## 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 in Computer and Information Sciences: Introduction to Data Science II
Spring 2024

CIS 299 Special Topics in Computer and Information Sciences: 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*
Spring 2019 - CSE 417T Introduction to Machine Learning
Spring 2016, Fall 2017 - CSE 131 Introduction to Computer Science


# Journal Publications

[1] 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.

[2] **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.

[3] **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.

[4] 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.

[5] 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

[6] **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.

[7] **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.

## Presentations

2024    The Data Science Intro Sequence at UChicago. Oral Presentation as a 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 a 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 a 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 a 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 a 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 a 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 a 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