

# Amanda R. Kube Jotte, MS, PhD

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## Academic Appointments

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**University of Chicago**

2022–Present

Preceptor in Data Science, Data Science Institute

## Education

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**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

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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

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**Instructor of Record:**

*Harry S. Truman College*

Spring 2023 - CIS 299 Special Topics in Computer and Information Sciences: Introduction to Data Science

*University of Chicago*

Winter 2023, Autumn 2023 (2 Sections) - DATA 118 Introduction to Data Science I

*Washington University in St. Louis*

Spring 2021 - DCDS 510 Data Wrangling

Fall 2020 - DCDS 499 Introduction to Graduate Research in Computational and Data Sciences

## 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

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- [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 Delicery: 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

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- [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

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- 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

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### **Program Committee:**

American Journal of Preventative Medicine (AJPM): 2023

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

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

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

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

Updated: November 12, 2023