Amanda Rose Kube

amanda.kube@wustl.edu

Academic Appointments

University of Chicago 2022–Present
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

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

Working Papers

[1] **Kube, A.**, Das, S., Fowler, P. J. (Working Paper). Data-Driven Homeless Services Designed for Efficiency and Transparency.

[2] **Kube, A.**, Das, S., Fowler, P. J., Vorobeychik, Y. (Working Paper). Just Resource Allocation? How Algorithmic Predictions and Human Notions of Justice Interact

Journal Publications

[3] **Kube, A.**, Das, S., Fowler, P. J. (Accepted to JAIR). Fair and Efficient Allocation of Scarce Resources Based on Predicted Outcomes: Implications for Homeless Service Delivery.

[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. (2019). Allocating Interventions Based on Predicted Outcomes: A Case Study on Homelessness Services. Proceedings of the AAAI Conference on Artificial Intelligence.

Presentations

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

Program Committee:
ACM Conference on Equity and Access in Algorithms, Mechanisms, and Optimization (EAAMO): 2022
AAAI Symposium on Educational Advances in Artificial Intelligence (EAAI): 2022
AAMAS Workshop on Autonomous Agents for Social Good (AASG): 2021

Updated: May 3, 2022