KEVIN CHRISTIAN WIBISONO

Ann Arbor, MI 48104 | (646) 651 6271 | kwib@umich.edu | https://k-wib.github.io/

EDUCATION

University of Michigan *Ann Arbor, MI*
PhD in Statistics (advised by Dr Yixin Wang; GPA: 4.0/4.0) *2021 - 2026 (expected)*
• *Research focus:* language models, in-context learning, causal inference with text data, regression discontinuity designs.
Columbia University *New York, NY*
MS in Data Science (GPA: 4.0/4.0) *2019 - 2020*
National University of Singapore *Singapore*
BS in Applied Mathematics and Statistics (GPA: 4.9/5.0; *best graduate in Appl. Math*) *2015 - 2019*
• Fully funded by the *Singapore Ministry of Foreign Affairs' Undergraduate Scholarship*.

COMPUTING SKILLS

Proficient in Python (including *Tensorflow*, *PyTorch*, *PySpark*, *Pandas*, *Numpy*), R (including *tidyverse*), and SQL.

PUBLICATIONS

Accepted

• **Wibisono, K. C.** and Wang, Y. (2024). From Unstructured Data to In-Context Learning: Exploring What Tasks Can Be Learned and When. *Neural Information Processing Systems*.
• Ignaccolo, C., **Wibisono, K. C.**, Plunz, R., and Sutto, M. (2024). Tweeting During the Pandemic in New York City: Unveiling the Evolving NYC's Sentiment Landscape Through a Spatiotemporal Analysis of Geolocated Tweets. *Journal of Urban Technology*.
• **Wibisono, K. C.** and Wang, Y. (2023). On the Role of Unstructured Training Data in Transformers' In-Context Learning Capabilities. *NeurIPS Workshop on Mathematics of Modern Machine Learning*.
• **Wibisono, K. C.** and Wang, Y. (2023). Bidirectional Attention as a Mixture of Continuous Word Experts. *Uncertainty in Artificial Intelligence*.

Submitted or In Preparation

• **Wibisono, K. C.**, Mukherjee, D., Banerjee, M., and Ritov, Y. *Estimation and Inference for the Average Treatment Effect in a Score-Explained Heterogeneous Treatment Effect Model*.
• **Wibisono, K. C.** and Wang, Y. *Causal Inference with Text-Based Treatments or Outcomes.*
• **Wibisono, K. C.** and Wang, Y. *Sequential Data Modeling via Exponential Family Embeddings with Attention*.

WORK EXPERIENCE

PhD Software Engineer Intern (Rider Structural Pricing), *Uber* *Jun - Aug 2024*
• Applied causal inference techniques to analyze the paycheck effect and its impact on demand and price elasticity.
• Enhanced Uber's demand model by adding paycheck features, improving predictive performance and business metrics.
• Implemented and refined large language model-based data augmentation methods, achieving notable improvements in test AUC and accuracy based on experiments conducted on Uber's demand data.
Junior Data Scientist (Fraud), *Walmart* *Feb - Jun 2021*
• Improved fraud detection system via model stacking and advanced feature engineering, reducing losses by around 30%.
Data Scientist Intern (Pricing), *Walmart* *Jun - Aug 2020*
• Developed item-scoring algorithms to inform strategic price investment decisions for each Sam's Club.
• Adapted and implemented natural language processing algorithms to improve item elasticity predictions.
Data Scientist Intern, *Portcast* *May - Aug 2018*
• Devised methods to improve existing cargo demand forecasting models of leading shipping companies.
• Enhanced forecasting accuracy via market signal experimentation, reducing mean absolute percentage errors by 5 to 15%.

TEACHING, MENTORSHIP AND LEADERSHIP EXPERIENCE

• **Teaching Assistant** for 8 courses, including *Data Analysis for Policy Research Using R*, *Data Mining and Statistical Learning*, *Analysis of Algorithms*, *Introduction to Data Science*, and *Fundamental Concepts of Mathematics*.
• **Research Supervisor** for three undergraduates in exploring large language models' geographical knowledge.
• **Events Chair** of UM Indonesian Society; **Student Mentor** of Columbia University's Data Science Institute.

SERVICE

• **Reviewer** for AISTATS (2023, 2024), NeurIPS (2024) and Cities (2024); **Volunteer** for NeurIPS and ICSA Symposium (2023).

SELECTED AWARDS

• **Rackham International Student Fellowship** for exceptional academic and professional promise *2023*
• **Ho Family Prize** as the best student in Applied Mathematics *2019*
• Silver Medal in the **Asian Pacific Mathematics Olympiad** *2013 and 2014*
• Bronze Medal in the **International Mathematical Olympiad** *2013*