

KEVIN CHRISTIAN WIBISONO

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

EDUCATION

University of Michigan

PhD in Statistics (advised by Dr Yixin Wang; GPA: 4.0/4.0)

Ann Arbor, MI

2021 - 2026 (expected)

- *Research focus:* language models, in-context learning, causal inference with text data, regression discontinuity designs.

Columbia University

MS in Data Science (GPA: 4.0/4.0)

New York, NY

2019 - 2020

National University of Singapore

BS in Applied Mathematics and Statistics (GPA: 4.9/5.0; *best graduate in Appl. Math*)

Singapore

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). In-Context Learning from Training on Unstructured Data: The Role of Co-Occurrence, Positional Information, and Training Data Structure. *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*.

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 Textual Treatments or Outcomes via Maximizing Contrasts*.
- **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