KEVIN CHRISTIAN WIBISONO

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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 (self-attention, transformers, in-context learning) and causal inference.

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) *2015 - 2019*

- Fully funded by the *Singapore Ministry of Foreign Affairs' Undergraduate Scholarship*.

COMPUTING SKILLS

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

PUBLICATIONS

- 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*.

WORK EXPERIENCE

PhD Software Engineer Intern, *Uber* *Jun - Aug 2024*

Graduate Researcher, *University of Michigan* *Aug 2022 - present*

- Investigate the theoretical aspects of attention-based language models, focusing on their connections to classical models and capabilities to perform in-context learning from unstructured training data.
- Develop statistical methods for conducting causal inference with textual treatments or outcomes and estimating heterogeneous treatment effects in regression discontinuity designs.
- Published and presented works at prominent machine learning conferences, workshops, and symposiums.

Junior Data Scientist, *Walmart (Sam's Club)* *Feb - Jun 2021*

- Improved Sam's Club fraud detection system through model stacking and advanced feature engineering in *PySpark*, leading to a reduction of around 30% in financial losses.

Data Scientist Intern, *Walmart (Sam's Club)* *Jun - Aug 2020*

- Developed item-scoring algorithms to inform strategic price investment decisions for each club.
- Adapted and implemented NLP algorithms in *PySpark* for improved 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 extensive market signal experimentation, reducing MAPE by 5 to 15%.

TEACHING AND LEADERSHIP EXPERIENCE

- **Teaching Assistant** for 8 courses, including *Data Analysis for Policy Research Using R* (graduate level), *Data Mining and Statistical Learning*, *Analysis of Algorithms* (upper undergraduate level), *Introduction to Data Science*, and *Fundamental Concepts of Mathematics* (lower undergraduate level).
- **Research Supervisor** for two undergraduates in exploring language models' geographical knowledge.
- **Events Chair** of UM Indonesian Society and **Student Mentor** of Columbia's Data Science Institute.

SERVICE

- **Reviewer** for AISTATS (2023 and 2024) and **Volunteer** for NeurIPS and ICSA Statistics 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*