Jason B. Cho

Education

Cornell University, Ithaca, NY

Bowers College of Computing and Information Science Doctor of Philosophy in Statistics and Data Science

Advisor: David S. Matteson Cumulative GPA: 4.0

 $Aug.\ 2021-Present$

Cornell University, Ithaca, NY

College of Agriculture and Life Sciences Masters of Science in Animal Science

Special Committee: Quirine M. Ketterings, Joe Guinness, Jan van Aardt

Cumulative GPA: 4.0

Cornell University, Ithaca, NY

College of Arts and Sciences
Bachelor of Arts in Statistical Science and Minor in Computer Science
Dean's list (Fall 2016, Spring 2018)

Aug. 2011 – May 2018

Aug. 2019 – May. 2021

Preprints

 Cho, J.B. and Matteson, D. S. Locally adaptive random walk stochastic volatility, 2024. URL https://arxiv.org/abs/2408.11315.

Publications

- 1. Cho, J.B., Serneels, S., & Matteson, D.S. Non-Fungible Token Transactions: Data and Challenges. Data Science in Science 2022; DOI: https://doi.org/10.1080/26941899.2022.2151950
- Cho J.B., Guinness J, Kharel T, Maresma Á, Czymmek KJ, van Aardt J, Ketterings QM. Proposed Method for Statistical Analysis of On-Farm Single Strip Treatment Trials. Agronomy. 2021; 11(10):2042. DOI: https://doi.org/10.3390/agronomy11102042
- 3. Cho, J.B., Guinness, J., Kharel, T.P. et al. Spatial estimation methods for mapping corn silage and grain yield monitor data. Precision Agric 22, 1501–1520 (2021). DOI: https://doi.org/10.1007/s11119-021-09793-z
- Sunoj S, Cho J, Guinness J, van Aardt J, Czymmek KJ, Ketterings QM. Corn Grain Yield Prediction and Mapping from Unmanned Aerial System (UAS) Multispectral Imagery. Remote Sensing. 2021; 13(19):3948. DOI: https://doi.org/10.3390/rs13193948
- 5. Sunoj, S, Kharel, D, Kharel, T, Cho, J, Czymmek, KJ, Ketterings, QM. Impact of headland area on whole field and farm corn silage and grain yield. Agronomy Journal. 2021; 113: 147–158. DOI: https://doi.org/10.1002/agj2.20489
- Cuadra, A., Li, S., Lee, H., Cho, J., and Ju, W. 2021. My Bad! Repairing Intelligent Voice Assistant Errors Improves Interaction. Proceedings of the ACM on Human-Computer Interaction Vol.5, No. CSCW1, Article 27 (April 2021), 24 pages. DOI: https://doi.org/10.1145/3449101

Conference Presentations

Cho, J., Maresma, A., Kharel, T. P., Godwin, G., Shajahan, S., Kharel, D., Oware, E., Van Aardt, J., Guinness, J., & Ketterings, Q. M. (2020) Spatial Estimation Methods for Mapping Corn Yield Monitor Data [Abstract]. ASA, CSSA and SSSA International Annual Meetings (2020) | VIRTUAL, Phoenix, AZ. https://scisoc.com/scisoc/2020am/meetingapp.cgi/Paper/126151 - 1st place in student competition

- Cho, J., Maresma, A., Kharel, T. P., Godwin, G., Kharel, D., Czymmek, K. J., Oware, E., Van Aardt, J., Guinness, J., & Ketterings, Q. M. (2020) Analyzing Single Strip Nitrogen Trials for Corn through Yield Stability Based Management Zones [Abstract]. ASA, CSSA and SSSA International Annual Meetings (2020) | VIRTUAL, Phoenix, AZ. https://scisoc.confex.com/scisoc/2020am/meetingapp.cgi/Paper/126196
- 3. Sunoj, S., Kharel, D., Kharel, T., Cho, J., Czymmek, K. J., & Ketterings, Q. M. (2020) Impact of Headland Area on Whole Field and Farm Corn Silage and Grain Yield [Abstract]. ASA, CSSA and SSSA International Annual Meetings (2020) | VIRTUAL, Phoenix, AZ. https://scisoc.confex.com/scisoc/2020am/meetingapp.cgi/Paper/126163
- 4. Sunoj, S., Cho, J., Guinness, J., Van Aardt, J., Oware, E., Czymmek, K. J., & Ketterings, Q. M. (2020) Corn Grain Yield Mapping from High Resolution UAS Imagery [Abstract]. ASA, CSSA and SSSA International Annual Meetings (2020) | VIRTUAL, Phoenix, AZ. https://scisoc.com/scisoc/2020am/meetingapp.cgi/Paper/126350
- Lehman, B., Cho, J., Mace, B., Walden, C., Czymmek, K. J., & Ketterings, Q. M. (2020) Do Corn Yield Stability Zones on a New York Dairy Farm Reflect within-Field Variability of Soil Characteristics? [Abstract]. ASA, CSSA and SSSA International Annual Meetings (2020) | VIRTUAL, Phoenix, AZ. https://scisoc.confex.com/scisoc/2020am/meetingapp.cgi/Paper/126601 - 3rd place in student competition
- 6. Cho, J., Lehman, B., Kharel, T., Kharel, D., Czymmek, K. J., Guinness, J., & Ketterings, Q. M. (2019) Year to Year Variability in Yield Stability Based Management Zone for Corn [Abstract]. ASA, CSSA and SSSA International Annual Meetings (2019), San Antonio, TX. https://scisoc.confex.com/scisoc/2019am/meetingapp.cgi/Paper/120439
- 7. Guinness, J., Cho, B. J., Kharel, T., Maresma, A., Czymmek, K. J., & Ketterings, Q. M. (2019) Using Spatial Statistics to Analyze on-Farm Trials [Abstract]. ASA, CSSA and SSSA International Annual Meetings (2019), San Antonio, TX. https://scisoc.confex.com/scisoc/2019am/meetingapp.cgi/Paper/120105

Research Assistantship

Cornell Nutrient Management Spear Program, Ithaca, NY

Research Assistant – under Professor Quirine Ketterings

Developed software for interpolating spatially correlated data (yield monitor data) using R

Performed statistical analysis to understand the effect of nitrogen on corn yield

Cornell Tech Future Automation Research Laboratory, New York, NY

Part-time Research Assistant – under Professor Wendy Ju

Designed several custom voice agent skills using JavaScript for a research project

• Assisted data collection and organization, literature review and overall project management

Cornell Statistical Consulting Unit, Ithaca, NY

Data Analyst

• Performed data analysis for researchers around Cornell. Tasks include dimensionality reduction, imputations, outlier detection, causal inference and clustering

Jul. 2018 – Dec. 2018

Jul. 2018 - May. 2019

Dec. 2018 – May. 2021

Academic Fellowship

2023 PiTech Siegel PhD Impact Fellowship

May. 2023 – Aug. 2023

Teaching Assistantship

Graduate Teaching Assistant

STSCI 2150: Introductory Statistics for Biology

STSCI 4100: Multivariate Analysis

STSCI 4090: Linear Models with Matrices

ORIE 3500: Engineering Probability and Statistics II

Aug. 2019 - Present