

Jason Byung Jae 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

Aug. 2019 – May. 2021

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

Preprints

1. Cho, J.B. and Matteson, D. S. Smoothing Variances Across Time: Adaptive Stochastic Volatility, 2024. URL <https://arxiv.org/abs/2408.11315>.
 2. Cho J.B., and Matteson, D. S. BASTION: Bayesian Adaptive Seasonality and Trend decomposition Incorporating Outliers and Noise URL https://jasoncho0914.github.io/BASTION/paper/BASTION_20250124.pdf.
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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>
2. 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>
4. 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>
6. 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

1. Cho, J., Serneels, S., & Matteson, D.S., (2023) Quantifying the Risk and Return of Non-Fungible Tokens. Conference on Advances in Time Series Analysis, Chicago, IL. <https://www.chicagobooth.edu/events/conference-on-advances-in-time-series-analysis>
2. 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.confex.com/scisoc/2020am/meetingapp.cgi/Paper/126151> – 1st place in student competition
3. 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>
4. 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>
5. 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.confex.com/scisoc/2020am/meetingapp.cgi/Paper/126350>
6. 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
7. 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>
8. 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

Dec. 2018 – May. 2021

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

Jul. 2018 – May. 2019

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

Academic Fellowship / Awards

2023 PiTech Siegel PhD Impact Fellowship

May. 2023 – Aug. 2023

2024 CALS Outstanding Teaching Assistant Awards in 2024

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