

Chaegeun Song

EMPLOYMENT

Assistant Professor of Statistics	August 2025 - Present
Department of Mathematics, Bryn Mawr College	Bryn Mawr, PA

EDUCATION

Ph.D. in Statistics	August 2025
The Pennsylvania State University	University Park, PA
Advisor: Bing Li	

M.A. in Applied Statistics	August 2020
Yonsei University	Seoul, Korea

B.A. in Applied Statistics	February 2018
Yonsei University	Seoul, Korea

FIELDS OF INTEREST

- **Topic:** Statistical machine learning, Dimension reduction, Uncertainty quantification, Optimization
- **Data:** Mixed data, Categorical data, Single-cell data

PAPERS

- Chaegeun Song, Zhong Zheng, Bing Li, and Lingzhou Xue. (2025+). "Collapsing categories for sufficient dimension reduction with mixed predictors" *In preparation*.
- Jinyi Xiang, Chaegeun Song, Xueqiu Lin, and Xiang Zhu. (2025+) "Characterization of long-term hematopoietic stem cell niche at single-cell resolution by in situ sequencing." *In preparation*.
- Chaegeun Song, Zhong Zheng, Bing Li, and Lingzhou Xue. (2025+). "Collapsing categories for regression with mixed predictors." *Submitted*.
- Chaegeun Song and Bing Li. (2025). "On exact Bayesian credible sets for discrete parameters." *Statistics & Probability Letters*.

HONORS AND AWARDS

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| • Climate and Diversity Award, Honorable mention | 2024 |
| Department of Statistics, The Pennsylvania State University | |
| • Travel Award | 2024 |
| International Society for Bayesian Analysis (ISBA) | |
| • Penn State Graduate Student International Travel Grants | 2024 |
| The Pennsylvania State University | |
| • Harkness Award for Excellence in Teaching, Runner up | 2023 |
| Department of Statistics, The Pennsylvania State University | |
| • Honors | 2012, 2016, 2017 |
| Yonsei University | |

RESEARCH EXPERIENCE

Ph.D. Student Research Assistant , The Pennsylvania State University	2020 - 2025
Research Team Leader , Institute of Convergence Science (ICONS)	2019 - 2020
Graduate Research Assistant , Yonsei Institute of Data Science (YIDS)	2018 - 2020
Data Analyst , Seoul Philharmonic Orchestra	2016

TEACHING EXPERIENCE

Instructor, The Pennsylvania State University

- STAT 440 - Computational Statistics Fall 2023
- STAT 318 - Elementary Probability Fall 2022, Spring 2023

Teaching Assistant, The Pennsylvania State University

- STAT 380 - Data Science Through Statistical Reasoning and Computation Summer 2023
- STAT 200 - Introduction to Statistics Summer 2021, Spring 2022
- STAT 250 - Introduction to Biostatistics Fall 2021
- STAT 414 - Mathematical Statistics Spring 2021
- STAT 318 - Elementary Probability Fall 2020

Teaching Assistant, Yonsei University

- STA3125 - Regression Analysis Fall 2018, Fall 2019
- STA3126 - Mathematical Statistics I Spring 2018, Spring 2019
- STA3125 - Introduction to Statistics Summer 2018, Winter 2018

PRESENTATIONS

- 2024 Joint Statistical Meetings. Portland, OR 2024
- 2024 ISBA World Meetings. Venice, Italy 2024
- 2023 Nonparametric Statistics and Statistical Learning Meeting. The Pennsylvania State University 2023

PROFESSIONAL SERVICE AND OUTREACH

- Reviewer for Journal of the American Statistical Association 2025
- Chair of New Advances in Nonparametric Modeling. 2024 Joint Statistical Meetings 2024
- Volunteer Tutor of Adult Learning. Mid-State Literacy Council 2024
- Discussant. Workshop on Statistical Network Science with Applications 2023

SKILLS

- Programming: R, Python, MATLAB
- Languages: Korean (native), English (fluent)