

Jinwon Sohn

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EDUCATION

- Purdue University** West Lafayette, USA
• *Ph.D. candidate - Statistics / Advisor : Professor Qifan Song* Jan 2021 - Present
- Yonsei University** Seoul, Korea
• *Master degree - Applied Statistics & Data Science / Advisor : Professor Taeyoung Park* Mar 2018 - Feb 2020
- Yonsei University** Seoul, Korea
• *Bachelor degree - Applied Statistics; Rank : 1/92* - Mar 2018

RESEARCH INTEREST

- Fairness-aware Machine Learning, Generative Modeling, Bayesian Statistics, Differential Privacy, Principal Curve

PUBLICATION

* : Alphabetical order

- **Sohn, J.**, Song, Q., & Lin, G. (2024). Fair Supervised Learning with A Simple Random Sampler of Sensitive Attributes. In *AISTAT* (pp. 1594-1602). PMLR.
- Kang, T., Kim, S., **Sohn, J.***, & Awan, J. (2024). Differentially Private Topological Data Analysis. *Journal of Machine Learning Research*.
- **Sohn, J.**, Jeong, S., Cho, Y. M., & Park, T. (2023). Functional Clustering Methods for Binary Longitudinal Data with Temporal Heterogeneity. In *Computational Statistics & Data Analysis*, 185, 107766.

PREPRINT

- **Sohn, J.**, & Song, Q. (2024). Parallely Tempered Generative Adversarial Networks. arXiv preprint arXiv:2411.11786. This is under major revision for the special issue (Statistical Science in Artificial Intelligence) in *Journal of American Statistical Association*.

WORKING PAPER

- **Sohn, J.**, Song, Q., & Lin, G. Task-tailored Pre-processing for Fair Downstream Supervised Learning. This will be submitted to *Transactions on Pattern Analysis and Machine Intelligence*.
- Lim, T., Nam, K., & **Sohn, J.*** Monotone curve estimation via convex duality. This will be submitted to *Operation Research*.

PRESENTATION

- 2024 Fall Graduate Student Workshop in Statistics, Purdue University, USA
- Parallely Tempered Generative Adversarial Networks
- 2024 Methods for Feature Selection, the Joint Statistical Meetings, USA
- Fair Supervised Learning with A Simple Random Sampler of Sensitive Attributes
- 2024 Spring Purdue Graduate Student Organization Seminar, Purdue University, USA
- Fair Supervised Learning with A Simple Random Sampler of Sensitive Attributes
- 2019 Fall Conference of the Korean Statistical Society, University of Seoul, Korea
- Variational Inference on Functional Clustering of Varying Coefficients
- 2018 Fall Conference of the Korean Statistical Society, Ewha Woman University, Korea
- Functional Clustering Methods for Binary Longitudinal Data with Temporal Heterogeneity

AWARD AND HONOR

- 2024 - 2025 Ross Lynn Research Scholar Grant for Statistics at Purdue University, USA
- College of Science Graduate Student Travel Award for Spring 2024 at Purdue University, USA
- 2024 High Profile Student Award for Research in Statistics at Purdue University, USA
- Third Place Award for Presentation, 2019 Fall Conference of the Korean Statistical Society, Korea
- Best Poster Award, 2018 Fall Conference of the Korean Statistical Society, Korea
- Grand Prize in 2018 Big Contest, National Information Society Agency, Korea
- Third Place Award in 2016&2017 Big Contest, National Information Society Agency, Korea
- High Honors - 2017 Spring & Honors - 2016 Fall

PROFESSIONAL CAREER

- **Data Science Consulting Service** West Lafayette, USA
Spring 2023 - Spring 2024
 - *Research Assistant*
 - **Research:** Worked on fairness-aware machine learning projects
- **Datarize** Seoul, Korea
2020
 - *Data Scientist*
 - **Algorithm Evaluation:** Evaluated a recommendation system through causal inference
 - **Developing Recommenders:** Developed a Multi-Objectives Contextual Multi-Armed Bandit
- **Bayesian Statistics Lab. - Yonsei University** Seoul, Korea
Feb 2018 - Feb 2020
 - *Research Assistant*
 - **Research:** Conducted research on a nonparametric Bayesian approach on varying-coefficient models
 - **Industry-Academic Cooperation:** Worked as a collaborative researcher of Amore-Pacific Corporation

SOFTWARE

- **fvcc:** Functional Clustering Methods for Varying Coefficients, written by R

TEACHING

- **Purdue University** West Lafayette, USA
Spring 2021 - Fall 2022
 - *Teaching Assistant*
 - **STAT 303:** Probability and Statistics for Business
 - **STAT 512:** Applied Regression Analysis
 - **STAT 517:** Statistical Inference
- **Yonsei University** Seoul, Korea
Feb 2018 - Feb 2020
 - *Teaching Assistant*
 - **STA 3124:** Stochastic Processes
 - **STA 3126:** Mathematical Statistics

SKILL

- **Languages:** Python(Adv), R(Adv), SQL

REFERENCE

Dr. Qifan Song
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