

JAE HO CHANG

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1958 Neil Ave, Columbus, OH 43210, USA

EDUCATION

- Ph.D. in Statistics** Aug 2021 – Present
The Ohio State University Columbus, OH, USA
- Ph.D. student
- M.A. in Applied Statistics** Mar 2018 – Feb 2020
Konkuk University Seoul, South Korea
- Thesis title: *The Sparse High-Dimensional Linear Discriminant Analysis with Moderately Clipped LASSO*
 - Advisor: Dr. Kyusang Yu, Dr. Sunghoon Kwon
- B.A. in Applied Statistics** Mar 2012 – Feb 2018
Konkuk University Seoul, South Korea
- GPA: 4.09/4.50

ACADEMIC AWARD

- Poster awards** Korean Statistical Society
- Honorable mention awarded for the presentation of *High-dimensional Linear Discriminant Analysis with Moderately Clipped LASSO*, 2021 Spring Conference
 - Honorable mention awarded for the poster presentation of *Ultimate sharpening of Jensen's Inequality*, 2019 Spring Conference

TECHNICAL SKILL

- Programming Languages** bash, R, Python
- Domain-specific Languages** SQL, Latex
- Softwares** Conda, PyCharm, docker, git, SPSS
- Platforms** Amazon AWS, GCP

TEACHING EXPERIENCE

- Graduate Teaching Associate** Aug 2021 – Present
Department of Statistics, The Ohio State University Columbus
- Recitation - STAT 1350 (Elementary Statistics)
 - Grading - STAT 3201 (Introduction to Probability for Data Analytics), STAT 3450 (Basic Statistics for Engineers)
- Part-time Lecturer** Jul 2020 – Oct 2020
GS Engineering & Construction Seoul
- Elementary statistics: population, parameters, random variables, discrete and continuous types, expectations, sample distribution, hypothesis testing, simple and multiple linear regressions
 - A tutorial on SPSS
- Teaching Assistant** Mar 2018 – Dec 2019
Department of Applied Statistics, Konkuk University Seoul

- Regressions Analysis, Theory of Likelihood Functions, Distribution Theory, Nonparametric Function Estimation, Mathematical Statistics

WORK EXPERIENCE

ML Engineer

Sep 2020 – Dec 2020

Real Data

Seoul

- Collaboration project on developing a self-driving vehicle module
- Was responsible for: image augmentation, image denoising, and training object detection model using GPU and PyTorch

Freelancer

May 2020 – Oct 2020

- Tutoring:
 - Statistics and theories for graduate students
 - Tutorials for using statistical softwares and programming languages
- Statistical Consulting:
 - (2020). Analysis of Performance Factors of KLPGA and LPGA Players, and Prediction of Winners. Journal of the Korean society for Wellness.
 - (2020). The Longitudinal Analysis of the Performance Factors Affecting the Korean Ladies Professional Golfer's Prize Money: Using Data from 2010 to 2019. Journal of Golf Studies.
 - (2020). A Case Study on Villagers' Participation and Project Achievement in Rural Development. Journal Of The Korean Society Of Rural Planning.

Assistant Researcher

Jun 2018 – Sep 2018

SK C&C, Korea University Medical Center

Seoul

- Contributed to developing antibiotics recommendation system for the antibiotics stewardship:
 - Created predictive models for two major types of multi-drug resistant(MDR) diseases
 - Data cleansing and wrangling
 - Fitted classification models to predict the risk of each patient's MDR type
 - Built a Flask API to serve predictive models to the client

Head Research Assistant

Mar 2018 – Dec 2019

Statistical Consulting Office at Konkuk University

Seoul

- Worked as the head research assistant: communication, data analysis, reporting
- A Meta-Analysis of the Stress Reaction Effect of Aromatherapy (Doctoral thesis in Art & Design, April 2018)
- A survey on the Korean traditional dessert classes (Korea Cultural Heritage Foundation, December 2018)

ACADEMIC WORKS

Papers

2018 – Present

- Chang, J., Lee, S., and Kim, H.-M. (2022). An asymptotically efficient closed-form estimator for the dirichlet distribution (under review)
- Chang, J., Moon, H., and Kwon, S. (2021). High-dimensional linear discriminant analysis with moderately clipped lasso. *Communications for Statistical Applications and Methods*, 28(1):21–37
- Lee, S., Chang, J., and Kim, H.-M. (2021). Further sharpening of jensen's inequality. *Statistics*, 55(5):1154–1168
- Lee, H., Chang, J., and Kim, G. (2020). A study on the conflict structure of the standing committee through topic analysis of the national assembly minutes health and welfare committee in the first half of the 20th national assembly. *Korean Party Studies Review*, 19(2):131–167
- (2022). Women mps' representation in korean national assembly: Structural topic modeling of the standing committees' minutes (under review)
- Kwon, S., Moon, H., Chang, J., and Lee, S. (2021). Sufficient conditions for the oracle property in penalized linear regression. *The Korean Journal of Applied Statistics*, 34(2):279–293