

JAE HO CHANG

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1958 Neil Ave, Columbus, OH 43210, USA

EDUCATION

Ph.D. in Statistics

The Ohio State University

Aug 2021 – Present

Columbus, OH, USA

- Ph.D. student

M.A. in Applied Statistics

Konkuk University

Mar 2018 – Feb 2020

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

Konkuk University

Mar 2012 – Feb 2018

Seoul, South Korea

- GPA: 4.09/4.50

ACADEMIC AWARD

Poster awards

Korean Statistical Society

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

TECHNICAL SKILL

Programming Languages

bash, R, Python

Domain-specific Languages

HTML, SQL, Latex

Softwares

Conda, PyCharm, docker, git, SPSS

Platforms

AWS, GCP

TEACHING EXPERIENCE

Graduate Teaching Assistant

Department of Statistics, The Ohio State University

Aug 2021 – Present

Columbus

- Recitation - STAT 1350 (Elementary Statistics)
- Grading - STAT 3201 (Introduction to Probability for Data Analytics), STAT 3450 (Basic Statistics for Engineers)

Part-time Lecturer

GS Engineering & Construction

Jul 2020 – Oct 2020

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

Department of Applied Statistics, Konkuk University

Mar 2018 – Dec 2019

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

Present

- Lee, S. K., Chang, J. H., and Kim, H.-M. (2021). Further sharpening of Jensen's inequality. *Statistics*, 55(5):1154–1168
- 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
- 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, 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