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   Present

· Chang, J., Lee, S., and Kim, H.-M. (2022). An asymptotically efficient closed–form estimator for the dirichlet distribution (under review)
· (2022). Women mps' representation in korean national assembly: Structural topic modeling of the standing committees' minutes (under review)
· 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