Han Jun Ko

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Education

M.S. in Statistics and Data Science   Mar 2023 – Present
Yonsei University, Seoul, Korea
GPA: 4.3/4.3 (4.0/4.0)

B.S. in Electrical and Electronic Engineering   Mar 2011 – Feb 2023
Double Major: Applied Statistics
Yonsei University, Seoul, Korea
GPA: 4.02/4.3 (3.85/4.0)

Research Experience

Master's Research (Github repo) (pdf)   Aug 2024 – Jun 2025
Statistics and Data Science, Yonsei University

- Asymptotic analysis of regularized LDA in the HDLSS regime via random matrix theory
- Closed-form MDP limit under identity covariance, explaining the peak error near aspect ratio $p/n = 1$
- Numerically stable pipeline to compute limiting misclassification error and map optimal ridge parameter over (γ, ρ)
- Advisor : Dr. Yongho Jeon

Basic Research Lab   Jan 2024 – Dec 2024
Statistics and Data Science, Yonsei University

- Covered the theoretical statistics and applications in machine learning and deep learning fields
- Regular paper reading and presentation seminar for graduate students
- My topic : Surprises in High-Dimensional Ridgeless Least Squares Interpolation (Hastie et al. 2022)

EE Capstone Project (Github repo) (pdf)   Jun 2022 - Dec 2022
Electrical and Electronic Engineering, Yonsei University

- Conducted research on how to match face picture with masked one
- Used methods such as cosine similarity and KL-Divergence
- Implemented corresponding codes using Pytorch
- Advisor : Dr. Andrew Beng Jin Teoh

Awards & Scholarships

Academic Excellence Scholarship, Yonsei University	Feb 2022
High Honors Award, Yonsei University	Feb 2020
Academic Excellence Scholarship, Yonsei University	Aug 2019
Academic Excellence Scholarship, Yonsei University	Feb 2019
Honors Award, Yonsei University	Feb 2019

Teaching Experience

Teaching Assistant, [Mathematical Statistics I]   Sep 2025 - Present
Teaching Assistant, [Regression Analysis]   Mar 2025 - Jun 2025
Teaching Assistant, [Mathematical Statistics I]   Sep 2024 - Dec 2024
Teaching Assistant, [Regression Analysis]   Mar 2024 - Jun 2024
Teaching Assistant, [Regression Analysis]   Sep 2023 - Dec 2023
Teaching Assistant, [Regression Analysis]   Mar 2023 - Jun 2023

Other Experience/Projects

Institute of Data Science (blog post)   Mar 2025 - Aug 2025

- Provide statistical consulting to master's and doctoral student of other department who require guidance on statistical methods for their dissertation or thesis.
- From fields such as education, psychology, and biology.
- Consult contents : repeated-measures ANOVA, mediation analysis, multilevel structural equation model

Big Data Analysis for Industry-Academic Cooperation (blog post)   Mar 2024 - Aug 2025

- Combine foundational lectures with project-based learning
- One semester for introduction, second semester for Kaggle-style project using open competition data
- Third semester for Company-sponsored projects using real corporate datasets to address ongoing business problems

Prediction of Housing Price (blog post)   May 2024 - Jun 2024

- Apply LMM with 'region' factor as random effect
- Compare between R^2 by Nakagawa (2012) and Bayesian R^2 suggested by Gelman et al. (2019)

Customer Churn-out Prediction (blog post)   Oct 2023 - Dec 2023

- Predict whether a customer may go into outflow so as to save profits.
- Sort out the meaningful variables through Ridge & Lasso first.
- Apply logistic regression after estimating the posterior of each coefficient using Rstan.

Relevant Skills

Programming Languages : R, Rcpp, Rstan, Python, Pytorch
Software and Tools : LaTeX

Language Proficiency

IBT TOEFL : **102** (R 23, L 26, S 26, W 27)   Aug 10, 2025