# Junhyoung Chung

Curriculum Vitae



## About me

This is about me

#### personal

Junhyoung Chung nationality: Korean 1999.07.22

#### Areas of specialization

Statistics Machine Learning Bayesian Networks Directed Acyclic Graph

#### Interests

Estimation of DAG with measurement error Causal Clustering

#### Contact

junhyoung0534@gmail.com

## EDUCATION

2024 ~ present	M.S. (Advisor: Gunwoong Park) STATISTICS · Seoul National University	۱ ۱
2018 ~ 2023	<b>B.S. &amp; B.A. (Summa cum</b> <i>laude)</i> STATISTICS & ECONOMICS - Seoul National University	圆

## Programming



### PUBLICATION

2023

Horse Race Rank Prediction Using Learning-to-Rank Approaches JUNYHOUNG CHUNG \* · DONGUK SHIN · SEYONG HWANG · GUNWOONG PARK The Korean Journal of Applied Statistics, 37, 239-253.

This is my first paper written during the undergraduate studies. This paper utilizes various Learning-to-Rank approaches at horse race rank prediction. The main contributions of this paper are: i) applying LTR approaches to sports, which have been only widely used in recommendation system, ii) enhancing the prediction performance compared to the previous research, and iii) establishing interpretability of the proposed model by Shapley values.

## **ON-GOING WORKS**

2024 Learning Distribution-Free Anchored Linear Structural Equation Models in the Presence of Measurement Error JUNHYOUNG CHUNG \* · YOUNGMIN AHN · DONGUK SHIN · GUNWOONG PARK Journal of Multivariate Analysis (under review) This paper proposes a new identifiability condition for Markov equivalence class and provides a distribution-free algorithm to capture the latent true graph in the presence of measurement error. It also ensures time efficiency as it estimates the true graph by inverse covariance matrix. 2024 Discovering Causal Structures in Privacy-Protected and Noisy Data: Frugality in Anchored Gaussian DAG Models JOONHO SHIN † · JUNHYOUNG CHUNG † · SEYONG HWANG † · GUNWOONG PARK † Computational Statistics and Data Analysis (under review) This paper considers a Gaussian DAG model in the presence of measurement error with unknown variances.

\* denotes the first author, and † denotes the authors that are equally contributed.

## Awards & Honors

2021	3rd Prize, Online over- seas volunteer program contest (Korean univer- sity council for social
2019 - 2021	service) Sergeant, Republic of Korea's Army

#### LANGUAGES

Korean	mother tongue					
English	•	٠	٠	•	•	
Japanese						
Spanish	•					