

Sang Kyu Lee

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EDUCATION	Michigan State University <i>Ph.D. in Statistics</i>	East Lansing, USA Sep. 2019 - Present
	<ul style="list-style-type: none">• Advisors: Dr. Hyokyung Grace Hong / Dr. Haolei Weng	
	Konkuk University <i>B.A. in Applied Statistics</i>	Seoul, Republic of Korea Mar. 2014 - Aug. 2016
	<ul style="list-style-type: none">• Thesis: Research and analysis for the consumption pattern of certain alcohol drink	
	<i>M.A. in Statistics</i>	Mar. 2017 - Feb. 2019
	<ul style="list-style-type: none">• Thesis: Ultimate sharpening of Jensen's inequality• Advisor: Dr. Hyoung-Moon Kim	
COMPUTER LANGUAGE PROFICIENCY	Proficient level : R, L ^A T _E X, Markdown, Python, C/C++(Rcpp) Intermediate level : SPSS, SQL, SAS Experience level : STATA	
SOFTWARES	DiSSMod <i>R package on CRAN; Maintainer and author</i>	Shiny example link / CRAN link
	Tools to fit sample selection models in case of discrete response variables, through a parametric formulation which represents a natural extension of the well-known Heckman selection model	
	EMSS <i>R package on CRAN; Maintainer and author</i>	CRAN link
	Some EM-type algorithms to estimate parameters for the well-known Heckman selection model	
RESEARCH PAPERS	Lee, S. K. , Chang, J. and Kim, H. M. "Further sharpening of Jensen's inequality", <i>revision invited (journal : Statistics)</i>	
	Yang, K., Lee, S. K. , Zhao, J. and Kim, H. M. "EMSS: New EM-type algorithms for the Heckman selection model in R", <i>revision invited (journal : R journal)</i>	
	Chang, J., Lee, S. K. and Kim, H. M. "New efficient estimator for Dirichlet distribution", <i>submitted</i>	

Zhao, J., **Lee, S. K.** and Kim, H. M. (2019) “Some counterexamples of a skew-normal distribution”, *Communications for Statistical Applications and Methods*, 26, 6, 583-589, <https://doi.org/10.29220/CSAM.2019.26.6.583>

EXPERIENCE

Research Assistant, Michigan State University East Lansing, USA
Graduate research assistant in Institute for Health Policy Oct. 2020 - Present

- Participated/ing several projects related to the topics such as the evaluations of policies about opioids and medicaid, and COVID-19 data analyses. I mainly working with hospitals and the state government(MDHHS).

Teaching Assistant, Michigan State University East Lansing, USA
Graduate teaching assistant Sep. 2019 - Dec. 2020

- Lab instructor for STT 200 class / A grader for various undergraduate classes

Regular Statistics Assessment, Statistics Korea Daejeon, Republic of Korea
Research Assistant Feb. 2019 - Nov. 2019

- Government funded research assistant for assessing some Statistics

Statistical Consulting Laboratory, Konkuk University Seoul, Republic of Korea
Statistical consultant Mar. 2017 - Feb. 2019

- Statistical consulting services for students from other departments. (Data handling to modelling)
 - Used methods: meta analysis, generalized linear model, linear regression, multivariate analysis, and elementary statistical methods
- Statistical consulting services for companies.
 - Collaboration with an adjunct professor about statistical modelling with real estate data
 - Survey modelling and survey analysis for Cultural Heritage Administration

Graduate Assistant, Konkuk University Seoul, Republic of Korea
Graduate research assistant Sep. 2017 - Feb. 2019

- Conducted researches in distribution theory(mainly skewed distributions), practical & fundamental statistical theories, statistical modellings, and made statistical softwares under the direction of Professor Hyoungh-Moon Kim.

Graduate teaching assistant Sep. 2017 - Feb. 2019

- Teaching assistant for undergraduate and graduate courses

KuStaR, Konkuk University

Seoul, Republic of Korea

Founder and member

A club for data analysis using R

Aug. 2018 - Present

INVITED TALKS Intermediate R programming - apply and Rcpp functions, Konkuk University

REFERENCES **Hyokyoung Grace Hong**, *Associate Professor*

Department of Statistics and Probability, Michigan State University

- Email: hhong@msu.edu
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Haolei Weng, *Assistant Professor*

Department of Statistics and Probability, Michigan State University

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Hyoung-Moon Kim, *Professor*

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