

Sang Kyu Lee

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EDUCATION	Michigan State University <i>Ph.D. in Statistics</i> <ul style="list-style-type: none">• Advisors: Dr. Hyokyung Grace Hong / Dr. Haolei Weng	East Lansing, USA Sep. 2019 - Present
	Konkuk University <i>B.A. & M.A. in Applied Statistics</i> <ul style="list-style-type: none">• Advisor: Dr. Hyoung-Moon Kim	Seoul, Republic of Korea Aug. 2016 & Feb. 2019
COMPUTER LANGUAGE PROFICIENCY	Proficient level : R, \LaTeX , Markdown, Python, C/C++(Rcpp) Intermediate level : SPSS, SAS Experience level : STATA, SQL	
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	
	MLEce <i>R package on CRAN; Author</i> CRAN link Estimate asymptotic efficient closed-form estimators and provide goodness of fit, estimates, plot and etc for various distributions	
RESEARCH PAPERS	Lee, S. K. , Kim, S., Hong, H. G. and Kim, M.-O. “Longitudinal disparity decomposition under the varying-coefficient framework”, <i>in preparation</i> Lee, S. K. and Weng, H. “Minimax risk bound for quantile regional regression via trend filtering”, <i>in preparation</i> Lee, S. K. , Weng, H. and Hong, H. G. “FDR control via quantile regional regression on ultra high dimension”, <i>in preparation</i>	

Kim, Y., Jang, Y., Chang, J. H., **Lee, S. K.**, Zhao, J. and Kim, H. M. “MLEce: Statistical Inference for Asymptotically Efficient Closed-Form Estimators”, *under review*

Chang, J., **Lee, S. K.** and Kim, H. M. “New efficient estimator for Dirichlet distribution”, *under review*

Lee, E., Park, S., **Lee, S. K.** and Hong, H. G. “Quantile forward regression for high dimensional survival data”, *Lifetime Data Analysis*, *revision invited*

Lee, S. K. and Kim, H. M. “Two tests using more assumptions but lower power”, *Communications for Statistical Applications and Methods*, 30, 1, 109-117, <https://doi.org/10.29220/CSAM.2023.30.1.109>

Yang, K., **Lee, S. K.**, Zhao, J. and Kim, H. M. (2021) “EMSS: New EM-type algorithms for the Heckman selection model in R”, *The R journal*, 13, 2, 306-320, <https://doi.org/10.32614/RJ-2021-098>

Lee, S. K., Chang, J. and Kim, H. M. (2021) “Further sharpening of Jensen’s inequality”, *Statistics*, 55, 5, 1154-1168, <https://doi.org/10.1080/02331888.2021.1998052>

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>

EXPERIENCES

Predoctoral Fellow

National Cancer Institute, National Institute of Health
Predoctoral fellow advised by Dr. Hyokyung G. Hong

Rockville, USA

Sep. 2022 - Present

- Participating in various multiple research projects related to various cancers.

Graduate Student Representative

Michigan State University

East Lansing, USA

Elected Ph.D. student Representative

Aug. 2021 - Present

- Participated as a member of several committees with professors; Major Curriculum Committee, Inviting Talk Committee and the Committee of Whole.

Graduate Research Assistant

Michigan State University

East Lansing, USA

Graduate research assistant in Institute for Health Policy

Oct. 2020 - Aug. 2022

- Participated 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).

Graduate 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

INVITED TALKS

Intermediate R programming - apply and Rcpp functions, Konkuk University

FDR control via regional quantile regression on ultra-high dimension, University of Florida

REFERENCES

Hyokyoung Grace Hong, *Adjunct Associate Professor & Senior Investigator*

Department of Statistics and Probability, Michigan State University

Division of Cancer Epidemiology and Genetics, The National Cancer Institute

- Email: grace.hong@nih.gov
- Homepage: <https://dceg.cancer.gov/about/staff-directory/hong-grace>

Haolei Weng, *Assistant Professor*

Department of Statistics and Probability, Michigan State University

- Email: wenghaol@msu.edu

Hyoung-Moon Kim, *Professor*

Department of Applied Statistics, Konkuk University

- Email: hmk966a@gmail.com
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