

# Sangwook Kang

## Curriculum Vitae

April 2024

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### Education and Qualifications

- 2007 Ph.D. in Biostatistics Department of Biostatistics, University of North Carolina at Chapel Hill  
2001 B.S. in Statistics Department of Computer Science and Statistics, Seoul National University

### Positions

- 2023/09 - **Department Head**, Department of Applied Statistics, College of Commerce and Economics, Yonsei University  
2023/03 - **Professor**, Department of Applied Statistics / Statistics and Data Science, College of Commerce and Economics, Yonsei University  
2021/03 - 2023/02 **Director of Graduate Studies**, Department of Statistics and Data Science, College of Commerce and Economics, Yonsei University  
2017/03 - 2023/02 **Associate Professor**, Department of Applied Statistics / Statistics and Data Science, College of Commerce and Economics, Yonsei University  
2019/08 - 2020/07 **Visiting Associate Professor**, Department of Statistics, College of Liberal Arts and Sciences, University of Connecticut  
2013/09 - 2017/02 **Assistant Professor**, Department of Applied Statistics, College of Business and Economics, Yonsei University  
2010/08 - 2013/08 **Assistant Professor**, Department of Statistics, College of Arts and Sciences, University of Connecticut  
2007/08 - 2010/08 **Assistant Professor of Biostatistics**, Department of Epidemiology and Biostatistics, College of Public Health, University of Georgia  
2001/08 - 2007/08 **Research Assistant**, Department of Biostatistics, University of North Carolina at Chapel Hill

### External Grants

#### Ongoing

- 2023 - 2030 RS-2023-00218377, Resilient Autonomous Grid Research Center, Co-I ₩13,000,000K  
2020 - 2024 NRF-2017R1A2B4005818, Semiparametric regression modeling of censored time-to-event data: a joint model approach for longitudinal and survival data, PI ₩440,000K

#### Pending

#### Completed

- 2010 - 2012 NIH STTR [R41/42], New Technology for Proteomics and Glycomics, Co-I (PI: James Atwood) \$ 400,510  
2010 - 2014 1R01GM088731-01 (NIH), Using the Scientific Curriculum Vitae to Study the Effects of Targeted Interventions on Research Careers, PI at UConn (Subcontract from UGA) (PI: Monica Gaughan) \$ 496,771  
2012 - 2015 DMS-1209022 (NSF), Statistical Inferences, Computing, and Applications of Semiparametric Accelerated Failure Time Models, Co-PI (PI: Jun Yan) \$ 130,000  
2014 - 2017 NRF-2014R1A1A2055898, Efficient Statistical Inferences using Induced Smoothing for Fitting Semiparametric Accelerated Failure Time Models, PI ₩125,000K  
2017 - 2020 NRF-2017R1A2B4005818, Statistical Inference and Application of Semiparametric Quantile Residual Life Models, PI ₩248,130K

## Internal Grants

### Completed

2013 - 2014	Yonsei Research Grant for New Faculty, PI	₩10,000,000
2012	UConn Research Foundation Faculty Large Grant, PI	\$ 19,379
2010	UGA Research Foundation Faculty Research Grant, PI	\$ 7,610

## Publications

### Refereed research papers

1. Kim, S. M., Y. Choi, S. Kang, and K. HIV/AIDS cohort study (2024). Smoothed quantile residual life regression analysis with application to the Korea HIV/AIDS cohort study. *BMC Medical Research Methodology* **24**(1), 44.
2. Dongjae Son, S. C. and S. Kang\* (2023). Quantile regression for competing risks data from stratified case-cohort studies: an induced-smoothing approach. *Journal of Statistical Computation and Simulation* **93**(8), 1225–1243.
3. Kim, K. H., D. J. Caplan, and S. Kang\* (2023). Smoothed quantile regression for censored residual life. *Computational Statistics* **38**(2), 1001–1022.
4. Seo, B. and S. Kang\* (2023). Accelerated failure time modeling via nonparametric mixtures. *Biometrics* **79**(1), 165–177.
5. Hwang, S.-Y., H. Oh, M.-Y. Rhee, S. Kang, and H.-Y. Kim (2022). Association of periodontitis, missing teeth, and oral hygiene behaviors with the incidence of hypertension in middle-aged and older adults in Korea: A 10-year follow-up study. *Journal of Periodontology* **93**(9), 1283–1293.
6. Park, J.-Y., J. Yoo, J. Jeon, J. Kim\*, and S. Kang\* (2022). Proton Pump Inhibitors and Risk of Cardiovascular Disease: A Self-Controlled Case Series Study. *The American Journal of Gastroenterology* **117**(7), 1063–1071.
7. Kim, K., J. Ko, and S. Kang\* (2021). Comparison of Variance Estimation Methods in Semiparametric Accelerated Failure Time Models for Multivariate Failure Time Data. *Japanese Journal of Statistics and Data Science* **4**, 1179–1202.
8. Lu, T.-s., S. Kang\*, and H. Zhou (2020). Semiparametric accelerated failure time modeling for multivariate failure times under multivariate outcome-dependent sampling designs. *Statistics and Its Interface* **13**(3), 373–383.
9. Caplan, D., Y. Li, W. Wang, S. Kang, L. Marchini, H. Cowen, and J. Yan (2019). Dental Restoration Longevity among Geriatric and Special Needs Patients. *JDR Clinical & Translational Research* **4**(1), 41–48.
10. Choi, S., S. Kang, and X. Huang (2018). Smoothed quantile regression analysis of competing risks. *Biometrical Journal* **60**(5), 934–946.
11. Kang, S. and K. Kim (2018). Accelerated Failure Time Models for Right Censored Failure Time Data. *Journal of the Korean Data & Information Science Society* **29**(6), 1365–1379.
12. Kim, S. H., S. Kang, and M.-K. Song (2018). Intensity of Care at the End of Life Among Older Adults in Korea. *Journal of palliative care* **33**(1), 47–52.
13. Kang, S. (2017). Fitting semiparametric accelerated failure time models for nested case-control data. *Journal of Statistical Computation and Simulation* **87**(4), 652–663.
14. Joeng, H.-K., M.-H. Chen, and S. Kang (2016). Proportional exponentiated link transformed hazards (ELTH) models for discrete time survival data with application. *Lifetime data analysis* **22**(1), 38–62.
15. Jung, J., O. Harel, and S. Kang (2016). Fitting additive hazards models for case-cohort studies: a multiple imputation approach. *Statistics in Medicine* **35**(17). sim.6588, 2975–2990.
16. Chiou, S., S. Kang, and J. Yan (2015). Rank-based estimating equations with general weight for accelerated failure time models: an induced smoothing approach. *Statistics in Medicine* **34**(9), 1495–1510.
17. Chiou, S. H., S. Kang\*, and J. Yan (2015). Semiparametric Accelerated Failure Time Modeling for Clustered Failure Times From Stratified Sampling. *Journal of the American Statistical Association* **110**(510), 621–629. eprint: <http://dx.doi.org/10.1080/01621459.2014.917978>.

18. Chiou, S. H., S. Kang, and J. Yan (July 2014b). Fast Accelerated Failure Time Modeling for Case-cohort Data. *Statistics and Computing* **24**(4), 559–568.
19. Chiou, S. H., S. Kang, and J. Yan (Nov. 2014c). Fitting Accelerated Failure Time Models in Routine Survival Analysis with R Package `aftgee`. *Journal of Statistical Software* **61**(11).
20. Chiou, S., S. Kang, J. Kim, and J. Yan (Oct. 2014). Marginal semiparametric multivariate accelerated failure time model with generalized estimating equations. *Lifetime Data Analysis* **20**(4), 599–618.
21. Ryan, J., R. Andrews, M. B. Barry, S. Kang, A. Iskandar, P. Mehla, and R. Ganeshan (2014). Preventability of 30-day readmissions for heart failure patients before and after a quality improvement initiative. *American Journal of Medical Quality* **29**(3), 220–226.
22. Kang, S., J. Cai, and L. Chambless (2013). Marginal additive hazards model for case-cohort studies with multiple disease outcomes: an application to the Atherosclerosis Risk in Communities (ARIC) study. *Biostatistics* **14**(1), 28–41.
23. Ryan, J., S. Kang, S. Dolacky, J. Ingrassia, and R. Ganeshan (2013). Change in Readmissions and Follow-up Visits as Part of a Heart Failure Readmission Quality Improvement Initiative. *The American Journal of Medicine* **126**(11), 989–994.
24. Shook, B. A., D. H. Manz, J. J. Peters, S. Kang, and J. C. Conover (2012). Spatiotemporal changes to the subventricular zone stem cell pool through aging. *The Journal of Neuroscience* **32**(20), 6947–6956.
25. Yoon, Y. J., C. Park, E. Hofmeister, and S. Kang (2012). Group variable selection in cardiopulmonary cerebral resuscitation data for veterinary patients. *Journal of Applied Statistics* **39**(7), 1605–1621.
26. Kang, S. and J. Cai (2010). Asymptotic results for fitting marginal hazard models from stratified case-cohort studies with multiple disease outcomes. *Journal of the Korean Statistical Society* **39**(3), 371–385.
27. Hofmeister, E. H., B. M. Brainard, C. M. Egger, and S. Kang (2009). Prognostic indicators for dogs and cats with cardiopulmonary arrest treated by cardiopulmonary cerebral resuscitation at a university teaching hospital. *Journal of the American Veterinary Medical Association* **235**(1), 50–57.
28. Kang, S. and J. Cai (2009a). Marginal Hazards Model for Case-cohort Studies with Multiple Disease Outcomes. *Biometrika* **96**(4), 887–901.
29. Kang, S. and J. Cai (2009b). Marginal Hazards Regression for Retrospective Studies within Cohort with Possibly Correlated Failure Time Data. *Biometrics* **65**, 405–414.
30. Caplan, D., J. Chasen, E. Krall, J. Cai, S. Kang, R. Garcia, S. Offenbacher, and J. Beck (2006). Lesions of endodontic origin and risk of coronary heart disease. *Journal of Dental Research* **85**(11), 996–1000.

## Other publications

1. Hofmeister, E. H., B. M. Brainard, Egger, and S. Kang (2013). Additional variables identified as significant return of spontaneous circulation in cardiac arrest and resuscitation. *Journal of the American Veterinary Medical Association* **243**(4), 480.

## Refereed book chapters

1. Chiou, S. H., S. Kang, and J. Yan (2016). “Change point analysis of top batting average”. In: *Extreme Value Modeling and Risk Analysis: Methods and Applications*. CRC Press, pp.493–504.

## Accepted/In Press

1. Choi, D., W. Bae, J. Yan, and S. Kang\* (2024+). A general model-checking procedure for semiparametric accelerated failure time models. *Accepted*.
2. Kim, K. H., S. H. Chiou\*, and S. Kang\* (2024+). Fitting Quantile Regression Model for Residual Life with R Package `qris`. *Accepted*.

## Submitted papers

1. Kim, S., Y. Cho, H. Ki, S. Park, D. Oh, S. Lee, Y. Cho, J. Kim, W. Lee, J. Park, I. H. Jin, and S. Kang (2024). Improved Mean Field Estimates of GEMS AOD L3 Product: Using Spatio-temporal Variability. *EGUsphere* **2024**, 1–27.
2. Choi, K. and S. Kang (2023). *Efficient Case-Cohort Design using Balanced Sampling*. arXiv: 2311.05914 [stat.ME].
3. Kim, G. and S. Kang\* (2024+). Deep Neural Network Based Accelerated Failure Time Models using Rank Loss. *arXiv preprint arXiv:2206.05974*.

4. Kim, R. S., S. Kang, M. S. Park, and I. Kim (2023+). Data augmentation using aggregate statistics from big data and survey: second-order delta-method and bootstrap inference based on Mosteller estimator. *Submitted*.

### Work in progress

1. Bae, W., D. Choi, S. Kang\*, and J. Yan (2023+). R package *afttest* for Checking Semiparametric Accelerated Failure Time Models. *In preparation*.
2. Park, J., B. Seo, J. Kim, and S. Kang\* (2023+). Fitting an accelerated failure time model with time-dependent covariates via nonparametric Gaussian scale mixtures. *In preparation*.
3. Park, T., J. Im, and S. Kang\* (2023+). Cox regression for case-cohort data using a semi-parametric fractional imputation. *In preparation*.
4. Yu, J., D. Bandyopadhyay, S. H. Chiou, and S. Kang (2022+). A weighted generalized estimating equation approach to mixture cure survival with informative cluster size. *In preparation*.

\*: corresponding author

### Book reviews

1. Kang, S. (2021). Advanced Survival Models. *Journal of the American Statistical Association* **116**(536), 2098–2099.
2. Kang, S. (2015). Statistical Inference on Residual Life by Jong-Hyeon Jeong; Springer. *Journal of Agricultural, Biological, and Environmental Statistics* **20**(3), 435–438.

### Books

1. Kang, S., S. Kang, I. Kim, C. Kim, H. Kim, K. J. H., S. Park, J. Park, T. Park, H. Lee, J. Im, Y. Jeon, S. Jeong, and I. Jin (2022). *Introductory Statistics: Learning by Excel, SPSS, and R*. 4th Edition, ISBN = 9791158083540(1158083548). Free academy.

### Software (R packages)

1. Bae, W., D. Choi, and J. Yan (2022). *afttest: Model Diagnostics for Accelerated Failure Time Models*. <https://CRAN.R-project.org/package=afttest>.
2. Kim, K. H., S. Kang, and S. H. Chiou (2022). *gris: Quantile Regression Model for Residual Lifetime Using an Induced Smoothing Approach*. <https://CRAN.R-project.org/package=gris>.
3. Chiou, S. H., S. Kang, and J. Yan (2014a). *aftgee: Accelerated Failure Time Model with Generalized Estimating Equations*. <https://CRAN.R-project.org/package=aftgee>.

### Awards and Recognitions

2014, 2019, 2021, 2022	Excellence in Teaching, Yonsei University, Seoul, Korea
2015	Chohun Research Award, College of Commerce and Economics, Yonsei University, Korea
2010	Kupper Dissertation Publication Award, Department of Biostatistics, UNC-CH
2001	Fryer Award, Department of Biostatistics, UNC-CH
1999, 2000	Tuition Scholarship, Department of Statistics, Seoul National University, Korea

### Invited Talks

- 16th International Conference of the ERCIM WG on Computational and Methodological Statistics (CMStatistics 2023), HTW Berlin, University of Applied Sciences, Berlin, Germany, Dec 2023.
- Department of Applied Mathematics and Statistics, SUNY Korea, Songdo, Korea, Nov 2023.
- The 12th ICSA International Conference, the Chinese University of Hong Kong, Hong Kong, Jul 2023.
- Bernoulli-IMS 10th World Congress in Probability and Statistics (WC2021), Seoul National University, Seoul, Korea, Aug 2021.

- Department of Statistics, Korea University, Seoul, Korea, Jun 2021.
- Department of Statistics, University of Connecticut, Storrs, CT, USA, Feb 2020.
- 12th International Conference of the ERCIM WG on Computational and Methodological Statistics (CMStatistics 2019), University of London, London, UK, Dec 2019.
- IASC-ARS 25th Anniversary Conference & CASC 2nd Annual Conference, Beijing Conference Center, Beijing, China, Nov 2018.
- 2018 ICSA China Conference, Shangri-La Hotel, Qingdao, China, July 2018
- The 27th Southern Taiwan Statistics Conference, National Cheng Kung University, Tainan, Taiwan, June 2018
- The 2nd International Conference on Econometrics and Statistics, The City University of Hong Kong, Hong Kong, June 2018.
- ENAR 2018 Spring Meeting, Atlanta, GA, USA, Mar 2018.
- 2018 SNU International Statistics Workshop, Seoul National University, Seoul, Korea, Jan 2018.
- IASC-ARS NZSA 2017 Spring Meeting, The University of Auckland, Auckland, New Zealand, Dec 2017.
- Institute of Health and Environment, Seoul National University, Seoul, Korea, Jun 2017.
- Survival Analysis Section, Semi-annual Korean Statistical Society Meeting, Sookmyung University, Seoul, Korea, May 2017.
- Department of Statistics, Inha University, Incheon, Korea, Apr 2017.
- The 31st NESS (New England Statistical Symposium), University of Connecticut, Storrs, MA, USA, Apr 2017.
- The 10th ICSA International Conference on Global Growth of Modern Statistics in the 21st Century, Shanghai Jiao Tong University, Shanghai, China, Dec 2016.
- Joint Conference by Korean National Institute of Food and Drug Safety Evaluation, Korea Society for Clinical Development, and International Biometric Society - Korea Region, Seoul, Korea, Dec 2016.
- Department of Statistics, Hankook University of Foreign Studies, Yongin, Korea, Nov 2016.
- Applied Statistics Section, Semi-annual Korean Statistical Society Meeting, Statistics Training Institute, Daejeon, Korea, Nov 2016.
- Department of Statistics, Pusan National University, Korea, Feb 2016.
- Department of Information Statistics, Korea National Open University, Korea, Nov 2015.
- Statistical Computing Section, Semi-annual Korean Statistical Society Meeting, Hankook University of Foreign Studies, Korea, Oct 2015.
- Statistical Computing Asia 2015, Academia Sinica, Taiwan, July 2015.
- Department of Applied Statistics, Chung-ang University, Korea, Feb 2015.
- The 2014 Annual Meeting of CIPS (The Chinese Institute of Probability and Statistics), National Dong Hwa University, Taiwan, Jun 2014.
- Sixth International Statistics Forum, Renmin University, China, May 2014.
- Department of Applied Statistics, Konkuk University, Korea, May 2014.
- Biometric Section, National Cancer Center, Ilsan, Korea, Dec 2013.
- Tri-School Conference, Ewha Woman's University, Korea, Nov 2013.
- Semi-annual Biotatistics Section Meeting of the Korean Statistical Society, Seoul National University, Korea, Nov 2013.

- Biostatistics Section, Semi-annual Korean Statistical Meeting, Dongguk University, Korea, Nov 2013.
- Biostatistics Section, Asan Medical Center, Korea, Oct 2013.
- Joint Meeting of the IASC Satellite Conference for the 59th ISI WSC and the 8th Asian Regional Section of the IASC, Yonsei University, Korea, Aug 2013.
- Department of Statistics, Colorado State University, Fort Collins, CO, USA, Apr 2013.
- Department of Mathematics & Statistics, University of Vermont, Burlington, VT, USA, Apr 2013.
- Department of Mathematics & Statistics, University of Massachusetts, Amherst, MA, USA, Oct 2012.
- Department of Epidemiology & Population Health, Albert Einstein College of Medicine, NY, USA, Sep 2012.
- Department of Statistics, Sungkyunkwan University, Korea, Jun 2012.
- ICSA (International Chinese Statistical Association) Applied Statistics Symposium, Boston, MA, USA, Jun 2012.
- The 26th NESS (New England Statistical Symposium), Boston University, Boston, MA, USA, Apr 2012.
- Department of Biostatistics, Yonsei University, Seoul, Korea, Jun 2011.
- Department of Applied Statistics, Yonsei University, Seoul, Korea, Jun 2011.
- Center for Statistical Sciences, Brown University, Providence, RI, USA, Feb 2011.
- International Chinese Statistical Association (ICSA) Applied Statistics Symposium, San Francisco, CA, USA, Jun 2009.
- Department of Statistics, Hankook University of Foreign Studies, Seoul, Korea, Jun 2009.
- Department of Statistics, Inha University, Incheon, Korea, Jun 2009.
- Department of Mathematics and Statistics, Texas-Tech University, Lubbock, TX, USA, Apr 2009.
- Department of Statistics, University of Georgia, Athens, GA, USA, Mar 2008.
- Institute of Bioinformatics, University of Georgia, Athens, GA, USA, Sep 2008.

## Teaching

### Yonsei University

Survival Data Analysis (STAT 3108)	3-credit undergraduate level	Fall 2013 - 2018, Fall 2020 - 2022
Analysis of Longitudinal Data (STAT 6660)	3-credit graduate level	Fall 2018, Spring 2022
Sampling Theory in Data Science (STAT 3123)	3-credit undergraduate level	Spring 2014 - 2019, Spring 2021 - 2022
Reliability and Survival Analysis I (STAT 6220)	3-credit graduate level	Spring 2014 - 2019, Fall 2020 - 2022
Analysis of Incomplete Data (STAT 6620)	3-credit graduate level	Fall 2014/2017
Linear Model (STAT 6110)	3-credit graduate level	Fall 2014 - 2016
Analysis of Sports Big Data (STAT 9073)	3-credit graduate level	Spring 2021
Business Statistics (MBA 6101)	1.5-credit MBA course	Spring 2016/2018
Statistics in Finance (MBF 6211.01)	3-credit MBA course	Summer 2021
Uncertainty, Data & Decision Making (MBS 6108)	3-credit graduate level	Fall 2015/2017
Multivariate Analysis of Big Data (GSE 5043)	1.5-credit graduate level	Spring 2015

### University of Connecticut

Design of Experiments (STAT 3515/5515)	3-credit (under)graduate level	Spring 2013
Introduction to Biostatistics (STAT 4625/5625)	3-credit (under)graduate level	Fall 2011/2012, Spring 2012
Survival Analysis (STAT5645)	3-credit graduate level	Spring 2011

### University of Connecticut Health Center

Topics in Intermediate Biostatistics (PUBH 5434)	3-credit graduate level	Fall 2011, 2012
Applied Regression Analysis (PUBH 5497)	3-credit graduate level	Fall 2010

### University of Georgia

Biostatistics for Public Health Sciences (BIOS 2010)	3-credit undergraduate level	Fall 2009, Spring 2010
Introductory Biostatistics II (BIOS 7020)	3-credit graduate level	Spring 2008, Spring 2009
Research Data Management & Computing (BIOS 7400)	3-credit graduate level	Fall 2008/2009, Spring 2010
Biostatistical Applications for Pharmaceutical and Biotechnology Industries	3-credit online course	Summer 2010

## Student Advisory

### Doctoral

- Soomin Kim (PhD): “Smoothed quantile residual life regression analysis with application to the Korea HIV/AIDS cohort study”, Department of Applied statistics, Yonsei University, Korea, 2018 - 2024.
- Kyu hyun Kim (PhD): “Statistical inference for fitting residual lifetimes for censored quantile regression models using induced-smoothing methods”, Department of Applied Statistics, Yonsei University, Korea, 2017 - 2022.
- Sy Han Chiou (PhD): “Statistical Methods and Computing for Semiparametric Accelerated Failure Time Model with Induced Smoothing”, Department of Statistics, University of Connecticut, US, 2010 - 2013 (co-advisor with J. Yan).
- Ju-young Park (PhD): Department of Applied statistics, Yonsei University, Korea, 2018 - present.
- Jisun Lim (PhD): Department of Applied statistics, Yonsei University, Korea, 2018 - present.
- Eun Young Park (PhD): Department of Statistics and Data Science, Yonsei University, Korea, 2020 - present.

- ▶ Jeongho Park (PhD): Department of Statistics and Data Science, Yonsei University, Korea, 2021 - present.
- ▶ Daheen Kim (PhD): Department of Statistics and Data Science, Yonsei University, Korea, 2022 - present.

### Master

- ▶ Takseok Park (MS): “Cox regression for case-cohort data using a semi-parametric fractional imputation”, Department of Statistics and Data Science, Yonsei University, Korea, 2023.
- ▶ Minhee Seo<sup>†</sup> (MS): “Modeling Large Spatial Dataset: Review of Statistical Approaches Solving “the big n problem” in Spatial Data”, Department of Statistics and Data Science, Yonsei University, Korea, 2022.
- ▶ Vermote Robin<sup>†</sup> (MS): “Deep Learning in healthcare”, Department of Statistics and Data Science, Yonsei University, Korea, 2022.
- ▶ Rinseo Park (MS): “(A) measurement error approach for satellite-based air quality modeling : using GEMS level-2 nitrogen dioxide products”, Department of Statistics and Data Science, Yonsei University, Korea, 2022.
- ▶ Seon Woo Lim (MS): “Comparison of different weighted estimating equations for fitting censored quantile regression models”, Department of Applied Statistics, Yonsei University, Korea, 2021.
- ▶ Hyewon Kang (MS): “Calibration of design weight in the marginal Cox model for two-phase stratified samples from multivariate failure time data”, Department of Applied Statistics, Yonsei University, Korea, 2019.
- ▶ Jungyeol Ko (MS): “Comparison of variance estimation methods in semiparametric accelerated failure time models”, Department of Applied Statistics, Yonsei University, Korea, 2019.
- ▶ Iktae Kim (MS): “Prevalence of health outcomes in Korea during 2015 based on the data integration of national health and nutrition examination survey and the medical records from national health insurance service”, Department of Applied Statistics, Yonsei University, Korea, 2019.
- ▶ Dongjae Son (MS): “Induced-smoothed quantile regression analysis for competing risks data under case-cohort study”, Department of Applied Statistics, Yonsei University, Korea, 2019.
- ▶ Min Seop Park (MS): “(A) Bayesian hierarchical model to combine summary statistics from big data and survey sample : an application to electronic health records for estimating total and subgroup prevalence”, Department of Applied Statistics, Yonsei University, Korea, 2018.
- ▶ Seho Park (MS): “Analysis of the top batting averages in major league baseball using generalized Pareto distribution”, Department of Applied Statistics, Yonsei University, Korea, 2018.
- ▶ Woojung Bae (MS): “R package afttest for checking semi-parametric accelerated failure time models”, Department of Applied Statistics, Yonsei University, Korea, 2018.
- ▶ Junghong Lee (MS): “Extending AK composite estimator : optimization and sampling schemes”, Department of Applied Statistics, Yonsei University, Korea, 2018.
- ▶ Dongrak Choi (MS): “Checking methods for semiparametric accelerated failure time models”, Department of Applied Statistics, Yonsei University, Korea, 2018.
- ▶ Tae-seok Ko (MS): “Approximate imputation modeling approach in multiple imputation for fitting accelerated failure time models from case-cohort studies”, Department of Applied Statistics, Yonsei University, Korea, 2017.
- ▶ Jae-yeup Lee (MS): “Handling missing values in longitudinal data for an application to digital quotient survey data”, Department of Applied Statistics, Yonsei University, Korea, 2017.
- ▶ Migyoung Kim (MS): “Comparison of Methods for Handling Tied Events in Semiparametric Additive Hazard Model”, Department of Applied Statistics, Yonsei University, Korea, 2016.

- ▶ Woobeen Lim (MS): “Analysis of Correlated Discrete Failure Times from One Stage Cluster Sampling Using Mixed Model”, Department of Applied Statistics, Yonsei University, Korea, 2016.
- ▶ Miri Yoo (MS): “Finite mixture modeling of accelerated failure time models for case-cohort data”, Department of Applied Statistics, Yonsei University, Korea, 2016.
- ▶ Hyunkin Lee (MS): “Approximate modeling in multiple imputation for case-cohort studies in additive hazard models”, Department of Applied Statistics, Yonsei University, Korea, 2016.
- ▶ Dahhay Lee (MS): “Fitting accelerated failure time model using calibrated weights for case-cohort study design”, Department of Applied Statistics, Yonsei University, Korea, 2015.
- ▶ Hyuntae Kyung (MS): “Fitting additive hazards model using calibrated weights for case-cohort study data”, Department of Applied Statistics, Yonsei University, Korea, 2015.
- ▶ Youngro Lee (MS): Department of Applied Statistics, Yonsei University, Korea, 2016 - present.
- ▶ Kaeum Choi (MS): Department of Statistics and Data Science, Yonsei University, Korea, 2021 - present.

†: substitution performance of Master’s thesis

## Professional Memberships

2020 - Member, Korean Data & Information Science Society  
 2005 - Member, Korean Statistical Society  
 2005 - Member, International Biometrics Society  
 2004 - Member, American Statistical Association

## Profession Services

### Editorial

2021 - Associate Editor, Korean Journal of Applied Statistics  
 2019 - Associate Editor, Journal of the Korean Official Statistics  
 2018 - Associate Editor, Journal of the Korean Statistical Society  
 2018 - 2020 Managing Editor, Bulletin of the Korean Statistical Society  
 2016 - 2017 Managing Editor, Communications for Statistical Methods and Applications  
 2016 - Associate Editor, Communications for Statistical Methods and Applications

### Board Member

2021 - Korean Data & Information Science Society  
 2020 - International Biometrics Society, Korean Region  
 2018 - 2020, 2023 - Korean Statistical Society

### Treasurer / Secretary

2016 - 2017 International Biometrics Society, Korean Region

### Journal Reviews

#### Statistical Journals

Annals of Applied Statistics; Biometrics; Biostatistics; Communications in Statistics - Simulation & Computation; Communications for Statistical Applications and Methods; Computational Statistics; Computational Statistics & Data Analysis; Lifetime Data Analysis; Japanese Journal of Statistics & Data Science; Journal of Applied Statistics; Journal of the American Statistical Association; Journal of Computational and Graphical Statistics; Journal of the Korean Statistical Society; Journal of Royal Statistical Society: Series C; Journal of Statistical Computation & Simulation; Journal of Statistical Research; Korean Journal of Applied Statistics; Pharmaceutical Statistics; Statistica Sinica; Statistics and Its Interface; Statistics in Bioscience; Statistics in Medicine

#### Statistical Reviewers for

American Journal of Epidemiology; BMC Medical Research Methodology; BMJ Open; Epidemiologic Perspective & Innovations; Journal of Dental Research; PLOS ONE

**Grant Reviews**

2020 Basic Science Program of National Research Foundation (NRF) of Korea

2015 National Security Agency Mathematical Sciences Program (NSA-AMS)