

Sy Han (Steven) Chiou, Ph.D..

CONTACT INFORMATION Department of Mathematical Sciences,
800 W. Campbell Road,
Richardson, Texas, USA 75080.

972.883.6362
schiou@utdallas.edu
www.sychiou.com

ACADEMIC APPOINTMENTS **Assistant Professor** Aug 2017 – Present
Department of Mathematical Science,
The University of Texas at Dallas

Postdoctoral Research Fellow Aug 2015 – July 2017
Department of Biostatistics,
Harvard T.H. Chan School of Public Health
Supervisor: Rebecca Betensky, Ph.D.

Assistant Professor Aug 2013 – May 2015
Department of Mathematics and Statistics,
University of Minnesota Duluth

Statistical Consultant Aug 2011 – May 2013
Institute for Public Health Research,
University of Connecticut
Supervisors: Jun Yan, Ph.D. and Robert H. Aseltine, Jr., Ph.D.

Research Assistant Aug 2010 – May 2013
Department Statistics,
University of Connecticut
Supervisors: Jun Yan, Ph.D. and Sangwook Kang, Ph.D.

Supervisor Aug 2008 – May 2010
Quantitative Learning Center,
University of Connecticut

EDUCATION **University of Connecticut**, Storrs, CT
Ph.D., Statistics, May 2013

Thesis Topic: Statistical methods and computing for semiparametric accelerated failure time model with induced smoothing.

Advisers: Jun Yan, Ph.D. and Sangwook Kang, Ph.D.

University of Connecticut, Storrs, CT

B.S., Statistics, May 2008

B.S., Applied Mathematical Sciences, May 2008

Member of the National mathematics Honorary Society, Pi Mu Epsilon.

REFEREED JOURNAL PUBLICATIONS

1. Ly, K., Oakley, D., Pine, A., Frosch, M., **Chiou, S.**, Betensky, R., Pomerantz, S., Hochberg, F., Batchelor, T., Cahill, D., and Dietrich, J. (2018+) "Wide Range of Clinical Outcomes in Patients with Gliomatosis Cerebri Growth Pattern: A Clinical, Radiographic, and Histopathologic Study." *Oncologist*, to appear.
2. **Chiou, S.**, Qian, J., Mormino, E., Bentensky, R., Alzheimers Disease Neuroimaging Initiative, Australian Imaging Biomarkers and Lifestyle Flagship Study of Aging, Harvard Aging Brain Study. (2018+) "Permutation tests for general dependent truncation." *Computational Statistics & Data Analysis*, to appear.

3. Beehler, S., **Chiou, S.**, Balmer, B. and Li, X. (2018+) “Intrarural variation in mental health status and help-seeking of veterans in the upper midwest.” *Journal of Rural Mental Health*, to appear.
4. Qian, J., **Chiou, S.**, Maye, J. E., Atem, F., Johnson, K. A., and Betensky, R. (2018+) “Threshold regression to accommodate a censored covariate.” *Biometrics*, to appear.
5. **Chiou, S.**, Huang, C.-Y., Xu, G., and Yan, J. (2018+) “Semiparametric regression analysis of panel count data: A practical review.” *International Statistical Review*, to appear.
6. Montero-Chacón, L.B., Padilla-Cuadra, J.I., **Chiou, S.**, and Torrealba-Acosta, G. (2018+) “High-density lipoprotein, mean platelet volume, and uric acid as biomarkers for outcomes in patients with sepsis: An observational study.” *Journal of Intensive Care Medicine*, to appear.
7. Torrealba-Acosta, G., Carazo-Céspedes, K., **Chiou, S.**, O’Brien, A., and Fernandez-Morales, H. (2018) “Epidemiology of stroke in Costa Rica: A seven-year hospital-based acute stroke registry of 1319 consecutive patients.” *Journal of Stroke and Cerebrovascular Disease*, 27 (5): 1143–1152.
8. **Chiou, S.**, Xu, G., Yan, J., and C.-Y. Huang (2017+) “Semiparametric estimation of the accelerated mean model with panel count data under informative examination times.” *Biometrics*, to appear.
9. Lee, S., Daimon, M., Di Tullio, M., Homma, S., Hasegawa, T., **Chiou, S.**, Nakao, T., Hirokawa, M., Mizuno, Y., Yatomi, Y., Yamazaki, T., and Komuro, I. (2018) “Beneficial effect of body weight control on left ventricular diastolic function in the general population: An analysis of longitudinal data from a health check-up clinic.” *European Heart Journal-Cardiovascular Imaging*, 19(2): 136–142.
10. Betensky, R. A. and **Chiou, S.** (2017) “Correlation among baseline variables yields non-uniformity of p-values.” *PLoS One*, 12(9): e0184531.
11. Xu, G., **Chiou, S.**, Huang, C.-Y., Wang, M.-C. and Yan, J. (2017) “Joint scale-change models for recurrent events and failure time.” *Journal of the American Statistical Association*, 112 (518): 764–805.
12. **Chiou, S.** and Xu, G. (2017) “Rank-based estimation for semiparametric accelerated failure time model under length biased sampling.” *Statistics and Computing*, 27 (2): 483–500.
13. Wang, W., Chen, M.-H., **Chiou, S.**, Lai, H.-C., Wang, X., Zhang, Z. and Yan, J. (2016) “Onset of persistent *Pseudomonas Aeruginosa* infection in children with cystic fibrosis with interval censored data.” *BMC Medical Research Methodology*, 16 (122): 1–10.
14. **Chiou, S.**, Kang, S. and Yan, J. (2015) “Rank-based estimating equations with general weight for the accelerated failure time model: An induced smoothing approach.” *Statistics in Medicine*, 34 (9): 1495–1510.
15. **Chiou, S.**, Kang, S. and Yan, J. (2015) “Semiparametric accelerate failure time modeling for clustered failure times from stratified sampling.” *Journal of American Statistical Association*, 110 (510): 621–629.
16. **Chiou, S.**, Kang, S. and Yan, J. (2014) “Fitting accelerated failure time model in routine survival analysis with R Package aftgee.” *Journal of Statistical Software*, 61 (11): 1–23.
17. **Chiou, S.**, Kang, S. , Kim, J. and Yan, J. (2014) “Marginal semiparametric multivariate accelerated failure time model with generalized estimating equation.” *Lifetime Data Analysis*, 20 (4): 599–618.
18. **Chiou, S.**, Kang, S. and Yan, J. (2014) “Fast accelerated failure time modeling for case-cohort data.” *Statistics and Computing*, 24 (4): 559–568.

INVITED BOOK
CHAPTERS

1. Vaughan, G., Aseltine, R., **Chiou, S.**, and Yan, J. (2016) “An alarm system for flu outbreaks using Google Flu Trend Data.” *Statistical Applications from Clinical Trials and Personalized Medicine to Finance and Business Analytics*, pp. 293–304, Springer International Publishing.
2. **Chiou, S.**, Kang, S., and Yan, J. (2015) “Disappearance of 0.400 hitters: A change point extreme value analysis of top baseball batting average.” *Extreme Value Modeling and Risk Analysis: Methods and Applications*, pp. 493-504, CRC Press.

SOFTWARE	<p>aftgee “Accelerated failure time model with generalized estimating equations.” https://cran.r-project.org/web/packages/aftgee/index.html</p> <p>censCov “Linear regression with a randomly censored covariate” https://cran.r-project.org/web/packages/censCov/index.html</p> <p>reReg “Recurrent event regression.” https://cran.r-project.org/web/packages/reReg/index.html</p> <p>tranSurv “Transformation model estimation of survival under dependent truncation and independent censoring.” https://cran.r-project.org/web/packages/tranSurv/index.html</p> <p>spef “Functions for fitting semiparametric regression models for panel count survival data.” https://cran.r-project.org/web/packages/spef/index.html</p>
AWARDS	<p>Harvard T.H. Chan School of Public Health</p> <p style="padding-left: 40px;">Kocaeli University School of Medicine International Travel Award 2016</p> <p>University of Minnesota Duluth</p> <p style="padding-left: 40px;">International Travel Grant 2014</p> <p>University of Connecticut</p> <p style="padding-left: 40px;">Doctoral Dissertation Fellowship 2013</p> <p style="padding-left: 40px;">Travel Award for Doctoral Students 2012</p> <p>International Chinese Statistical Association</p> <p style="padding-left: 40px;">Student Paper Award 2012</p>
TEACHING EXPERIENCE	<p>The University of Texas at Dallas</p> <p style="padding-left: 40px;">Stat 6390 Special Topic in Statistics: Analysis of Survival Data Fall 2018</p> <p style="padding-left: 40px;">Stat 5353 Probability and Statistics for Data Science and Bioinformatics Spring 2018</p> <p style="padding-left: 40px;">Stat 2332 Introductory Statistics for Life Sciences Fall 2017</p> <p>Kocaeli University School of Medicine, Turkey</p> <p style="padding-left: 40px;">Introduction to Survival Analysis Methods in R (guest lecturer) May 2016</p> <p>The University of Minnesota Duluth</p> <p style="padding-left: 40px;">Stat 4101 Actuarial Probability Spring 2015</p> <p style="padding-left: 40px;">Stat 4060 Introduction to Biostatistics Spring 2014, Spring 2015</p> <p style="padding-left: 40px;">Stat 3611 Introduction to Probability and Statistics Fall 2013, Fall 2014, Spring 2015</p> <p style="padding-left: 40px;">Stat 5531 Probability Models Fall 2014</p> <p style="padding-left: 40px;">Stat 1411 Introduction to Statistics Summer 2014</p> <p>University of Connecticut</p> <p style="padding-left: 40px;">Stat 315 Introduction to Mathematical Statistics Fall 2011, Fall 2012</p> <p style="padding-left: 40px;">Stat 110 Elementary Concepts of Statistics Summer 2011</p> <p style="padding-left: 40px;">Stat 110 Elementary Concepts of Statistics (as teaching assistant) Fall 2008 – Fall 2011</p>
SOA EXAM	<p>Society of Actuaries: Exam P, FM, MLC passed.</p>
JOURNALS REVIEWED	<p><i>Journal of the Royal Statistical Society: Series B, Annals of Applied Statistics, Canadian Journal of Statistics, Communications in Statistics, Journal of Statistical Planning and Inference, Lifetime Data Analysis, Journal Statistics Software, Statistical Methods in Medical Research, PLoS One, R Journal, Journal of Korean International Statistics Society, Scandinavian Journal of Statistics, Journal of Statistical Computation and Simulation, Statistics in Medicine, Statistics in Bioscience, International Journal of Biostatistics.</i></p>