

TONY SIT 薛賢鴻

Associate Professor
Director, M.Sc. in Risk Management Science
Programme

Tel: (+852) 3943 7054
Email: tonysit/at/sta.cuhk.edu.hk



Education background

- 2006 B.Sc. in Risk Management Science, The Chinese University of Hong Kong
- 2008 M.Phil. in Risk Management Science, The Chinese University of Hong Kong
- 2012 Ph.D. in Statistics, Columbia University

Research Interests

Survival analysis; Quantile regression; Network modelling; Risk management

Publications and Preprints

Acknowledgement: research is/was supported by HKSAR RGC ECS/GRF Grants

Statistical methodology papers

- Kim, J.P., Lu, W., Sit, T and Ying, Z. (2013), "A Unified Approach to Semiparametric Transformation Models under General Biased Sampling Scheme," *Journal of American Statistical Association*, 108, 217–27.
- Brown, M., de la Pena, V.H. and Sit, T. (2015), "From Boundary Crossing of Non-random Functions to Boundary Crossing of Stochastic Processes" *Probability for Engineering and Information Science*, 29, 345–59.
- Sit, T., Liu, M., Shnaidman, M., and Ying, Z. (2016), "Design and Analysis of Clinical Studies in the Presence of Delayed Treatment Effect," *Statistics in Medicine*, 35, 1774–9.
- Kim, J.P., Sit, T. and Ying, Z. (2016), "Accelerated Failure Time Model under General Biased Sampling Scheme," *Biostatistics*, 17, 576–88.
- Chan, N.H. and Sit, T. (2016), "Artifactual Unit Root Behavior of Value at Risk (VaR)," *Statistics and Probability Letters*, 116, 88–93.
- Brown, M., de la Pena, V. H., Klass, M. and Sit, T. (2016), "On an Approach to Boundary Crossing by Stochastic Processes," *Stochastic Processes and their Applications*, 126, 3843–53.
- Xu, G., Sit, T., Wang, L. and Huang, C.-Y. (2017), "Estimation and Inference of Quantile Regression for Survival Data under Biased Sampling," *Journal of the American Statistical Association*, 112, 1571–86.
- Chan, K.C.G., Ling, H.K., Sit, T. and Yam, S.C.P. (2018), "Monotone Density Estimation in Multidimensional Biased Sampling Models," *The Annals of Statistics*, 46, 2125–52.
- Sit, T., Xing, Y., Xu, Y. Z. and Gu, M.G. (2019), "Pseudo Value Method for Ultra High-dimensional Semiparametric Models with Life-time Data," *Statistica Sinica*, 29, 1939–61.
- Chen, J., Sit, T. and Wong, H. Y. (2019), "Simulation-based Value-at-Risk for Nonlinear Portfolios," *Quantitative Finance*, 19, 1639–58.
- Chu, C.W., Sit, T. and Xu, G. (2019+), "Transformed Dynamic Quantile Regression on Censored Data," To appear in *Journal of the American Statistical Association*.
- Sit, T., Yu, Y. and Ying, Z. (2020+), "Event History Analysis of Dynamic Communication Networks," Under revision.
- Cai, Z. and Sit, T. (2019+), "Quantile Regression Model with Time-Varying Covariates under Length-Biased Sampling," Under revision.
- Xing, Y., Sit, T. and Wong, H.Y. (2020+), "Variance Reduction for Risk Measure Estimation with Importance Sampling," Submitted.

- Chu, C.W. and Sit, T. (2020+), "Locally Homogeneous Censored Quantile Regression Model with Time-Dependent Covariates," Submitted.
- Chan, K.C.G., Ling, H.K., Sit, T. and Yam, S.C.P. (2020+), "Grenander-type Nature of Monotone NPMLE of Multi-sample Biased Sampling Models," Submitted.
- Lee, S.M., Sit, T. and Xu, G. (2020+), "Efficient Estimation for Censored Quantile Regression," Submitted.
- Sit, T., Xu, G. and Huang, C.-Y. (2020+), "Proportional Likelihood Ratio Models for Competing Risks," (Manuscript).

Interdisciplinary Research

- Brown, M., de la Pena, V.H., Kushnir, Y., Ravindarath, A. and Sit, T. (2011), "On a new approach for estimating threshold crossing times with an application to global warming," *Proceeding of the New York Workshop on Computer, Earth, and Space Sciences 2011*, Goddard Institute for Space Studies (GISS), National Aeronautics and Space Administration (NASA).
- Lam, H.S., Sit, T., Chau, C.L., Cheung, H.M., Wong, P.S. and Ng, P.C. (2016), "Attitudes of Parents and Health Care Workers to Major Surgery for High-Risk Preterm Infants," *The Journal of Paediatrics*, 177, 78–83.e3.
- Leung, K.T., Lam, H.S., Chan, K.Y.Y., Sit, T., Wong, R.P.O., Yu, J.W.S., Li, K. and Ng, P.C. (2016), "Regulation of Circulating Hematopoietic Stem/Progenitor Cells in Preterm Infants with Septicemia," *Stem Cells and Development*, 25, 1780–7.
- Ng, P.C., Chan, K.Y.Y., Ma, T.P.Y., Sit, T., Lam, H.S., Leung, K.T., Wong, R.P.O., Chan, C.N.L., Pang, L.I.Y., Cheung, H.M., Chu, W.C.W. and Li, K. (2019), "Plasma miR-1290 is a Novel and Specific Biomarker for Early Diagnosis of Necrotizing Enterocolitis in Preterm Infants - Biomarker Discovery and a Prospective Cohort Evaluation," *The Journal of Paediatrics*, 205, 83–90.e10.
- Leung, K.T., Ng, P.C., Li, K., Chan, K.Y.Y., Leung, A.W.K., Ng, M.H.L., Zhang, X.-B., Tsang, K.S., Sit, T., Yu, J.W.S., Wong, Y.T.S., Cheng, F.W.T., Leung, T.F. and Li, C.K. (2019+), "Tetraspanin CD9 is a Potential Target for Treatment of Pediatric B-precursor Acute Lymphoblastic Leukemia," To appear in *Leukemia*.
- Zhang, J., Cheuk, K.-Y., Xu, L., Wang, Y., Feng, Sit, T., Cheung, K.-L., Nepotchatykh, E., Lam, T.-P., Liu, Z., Hung, A.L.H., Zhu, Z., Moreau, A., Cheng, J.C.Y., Qiu, Y. and Lee, W.Y.W. (2019+) "A Validated Composite Model to Predict Risk of Curve Progression in Adolescent Idiopathic Scoliosis," To appear in *EClinicalMedicine*.

Graduate Students

- Junyao Chen (co-supervised with Prof. Hoi Ying Wong), M.Phil. in Risk Management Science, CUHK.
- George Chi Wing Chu, M.Phil. in Risk Management Science, CUHK.
- Yue Xing (co-supervised with Prof. Hoi Ying Wong), M.Phil. in Risk Management Science, CUHK.
- Arthur Sze Ming Lee, M.Phil. in Risk Management Science, CUHK.
- Yuxin Li (co-supervised with Prof. Ngai Hang Chan), Ph.D. in Statistics, CUHK.
- Tim Man Yiu Tsang (co-supervised with Prof. Hoi Ying Wong), M.Phil. in Risk Management Science, CUHK. Ongoing.
- Andrian Dzi Hin Wong (co-supervised with Dr Philip Pak Kuen Lee), M.Phil. in Risk Management Science, CUHK. Ongoing.
- Zexi Cai, M.Phil. in Risk Management Science, CUHK. Ongoing.
- Sihan Chen, M.Phil. in Risk Management Science, CUHK. Ongoing.

Teaching

RMSC2001 - Introduction to Risk Management
RMSC4102 - Research Projects
RMSC6006 - Portfolio Theory from Risk Management Perspectives
STAT5010 - Advanced Statistical Inference
STAT5102 - Regression in Practice

Last updated on 1st January 2020.