

# Xing Song, PhD Publications

## 1. Scholarly Publications

### Manuscripts Published or In Press

- K. Rekab, **Xing Song**. Second Order Optimality of Sequential Designs with Application in Software Reliability Estimation. *Biometrics & Biostatistics International Journal*. 2015. 2(4).
- **X. Song**, K. Rekab. Asymptotic Optimality of Three Stage Design for Estimating Product of Means with Applications in Reliability Estimation and Risk Assessment. *Journal of Advances in Applied & Computational Mathematics*. 2016. 3: 8-19
- **X. Song**, K. Rekab. Asymptotic Efficiency in Sequential designs for Estimating Product of Finite Means in the Exponential Family Case. *Journal of Applied Mathematics and Statistics*. 2017. 4(1): 50-65
- W. Chen, Y. Hu, L. Wu, X. Zhang, K. Liu, J. He, Z. Tang, **X. Song**, L.R. Waitman, M. Liu. Causal risk factor discovery for severe acute kidney injury using electronic health records. *BMC Medical Informatics and Decision Making*. 2018. 18(Suppl 1):13
- **X. Song**, L.R. Waitman, Y. Hu, ASL. Yu, D. Robbins, M. Liu. Robust Clinical Market Identification for Diabetic Kidney Disease with Ensemble Feature Selection. *Journal of the American Medical Informatics Association*. 2019. 26(3):242-253.
- **X. Song**, L.R. Waitman, Y. Hu, ASL. Yu, D. Robbins, M. Liu. Building predictive models for diabetic kidney disease: an exploration of ontology-based EMR data abstraction. *American Medical Informatics Association Informatics Summits Transl. Sci. Proc*. 2019:704-713.
- **X. Song**, Lemuel R. Waitman, Alan S.L. Yu, David C. Robbins, Yong Hu, Mei Liu. Longitudinal risk prediction of chronic kidney disease in diabetic patients using temporal-enhanced gradient boosting machine: retrospective cohort study. *JMIR Medical Informatics*. 2020. 8(1):e15510.
- **X. Song**, L.R. Waitman, Y. Hu, M. Liu. The Impact of Medical Big Data Anonymization on Early Acute Kidney Injury Risk Prediction *Accepted by American Medical Informatics Association Informatics Summits 2020. Houston*.
- **X. Song**, A. S.L. Yu, J.A. Kellum, L.R. Waitman, M.E. Matheny, S.Q. Simpson, Y. Hu, M. Liu. Transportability of an Explainable Artificial Intelligence Model for Acute Kidney Injury Prediction. *Nat Commun*. 2020. 11, 5668
- **X. Song**, M. Liu, L.R. Waitman, A. Patel, S.Q. Simpson, Clinical Features Associated with Rapid Treatment for Sepsis. Submitted to PLOS One in Jul. 2020
- R. Bisary, **X. Song**, J. Salle, M. Liu, A. Patel, S.Q. Simpson. Timing and Progression to Septic Shock Among Emergency Department Patients with Suspected Infection. Submitted to CHEST in December 2020
- A. Furmanchuk, M. Liu, **X. Song**, L.R. Waitman, J.R. Meurer, K. Osinski, A. Stoddard, E. Chrischilles, J.C. McClay, L.G. Cowell, U. Tachinardi, P.J. Embi, A.S.M. Mosa, V. Mandhadi, R.C. Shah, D. Garcia, F. Angulo, A. Patino, W.E. Trick, T. Markossian, L.J. Rasmussen-Torvik, A.N. Kho, B.S. Black. The Effect of the Affordable Care Act on Diabetes Care at Major Health Centers: New Patients, Newly Detected Diabetes, and Diabetes Medication Management. Submitted to BMJ in November 2020.
- A. Furmanchuk, M. Liu, **X. Song**, L.R. Waitman, J.R. Meurer, K. Osinski, A. Stoddard, E. Chrischilles, J.C. McClay, L.G. Cowell, U. Tachinardi, P.J. Embi, A.S.M. Mosa, V. Mandhadi, R.C. Shah, D. Garcia, F. Angulo, A. Patino, W.E. Trick, T. Markossian, L.J. Rasmussen-Torvik, A.N. Kho, B.S. Black. The

Effect of the Affordable Care Act on Outpatient Visits by Low-Income established Patients at Major Health Centers. Submitted to BMJ in November 2020.

- R. Wang, Z.Q. Miao, T.M. Liu, M. Liu, K. Grdinovac, **X. Song**, Y. Liang, D. Delen, and W. Paiva. Derivation and Validation of Essential Predictors and Risk Index for Early Detection of Diabetic Retinopathy Using Electronic Health Records. Submitted to J. Clin. Med. In January 2021
- L.R. Waitman, D.L. Walpitage, D.C. Connolly, L. Patel, M. Liu, **X. Song**, M.C.Schroeder, J.J. VanWormer, A.S.Mosa, A.M.Davis. Enhancing Data Completeness by Integrating Multi-state Insurance Claims with Electronic Health Records and the Relative Strengths of Administrative and Clinical data to Support Obesity Comparative Effectiveness Research. In preparation.

### Abstracts, Presentations and Posters

- **X. Song**, L.R. Waitman, Y. Hu, ASL. Yu, D. Robbins, M. Liu. Influence of bias introduced by filtering patients with “complete” electronic health records (EHR) on predicting diabetic kidney disease. *AMIA Informatics Summits (AMIA '18)*, San Francisco CA, March 2018.
- **X. Song**, M. Liu, L.R. Waitman, A. Patel, S.Q. Simpson. Visualization of Clinical Pathways for Severe Sepsis Patients. *American Medical Informatics Association Informatics Summit (AMIA '19)*. San Francisco CA, March 2019.
- **X. Song**, A Demonstration on Cohort Discovery of Acute Kidney Injury Patients. 1<sup>st</sup> *Frontiers Informatic Meetup*. Kansas City, KS. Mar. 2019
- **X. Song**, M. Liu, L.R. Waitman, A. Patel, S.Q. Simpson, Discovering Factors Inducing Rapid Treatment of Sepsis. *American Thoracic Society 2019 International Conference*. Dallas, TX, May 2019.
- **X. Song**, L.R. Waitman, M. Liu, L. Walpitage, D. Connolly, L. Patel, M. Schroeder. GROUSE 2019 Status. *2019 GPC Learning Engagement Conference*. Kansas City, MO, Oct. 2019
- S. Parashar, **X. Song**, M. Liu, & S.Q. Simpson, Comparison of Severe Sepsis and Sofa for Predicting Outcomes of ED Patients with Suspected Infection. *Critical Care Medicine, Society of Critical Care Medicine*, 48(1), 768.
- **X. Song**, M. Liu, L.R. Waitman, A. Patel, S. Parashar, S.Q. Simpson, Discovery of Clinical Factors Associated with Suspected Infection. *Critical Care Medicine, Society of Critical Care Medicine*. 2020;48(1):784.
- H. Dharia, D. Hayley, C. Burkhardt, **X. Song**, Do No Harm: Institutional experience of central nervous system (CNS)-active medications (CAMs) prescription per Beers criteria update. AASLD Conference 2020. *KUMC Resident Research Day*. Kansas City, KS, Mar. 2020.
- **X. Song**, Green HERON in Action. 3<sup>rd</sup> *Frontiers Informatic Meetup*. Kansas City, KS. Dec. 2019
- R. Mousa, A. Dias, **X. Song**, LA. Clough, F. Merino, W. El Atrouni. Outcomes of HIV-associated lymphoma treatments: a contemporary single center cohort study. *IDWeek 2020*. Virtual, Oct. 2020.
- W. Dunn, **X. Song**, M. Lowrance, D. Koestler, A. Komatz, GJ. Chen, E. Al-Hihi, K. Grdinovac, RM. Taylor, MS. Olyae, SA. Weinman. Patients with Type 2 Diabetes (T2D) and Elevated Fibrosis-4 Index (FIB-4) under-referred to hepatology and have underrecognized hepatic decompensation complications. *AASLD Conference 2020*. Virtual, Nov. 2020.
- **X. Song**, M. Liu, L.R. Waitman, A. Patel, S. Parashar, S.Q. Simpson, Discovery of Clinical Factors Associated with Suspected Infection. *AMIA Annual Symposium*. Virtual, Nov, 2020
- **X. Song**, L. Patel, L.R. Waitman, M. Liu. Multi-view Gradient Boosting Tree for Acute Kidney Injury Prediction and Modifiable Risk Factor Identification. *AMIA Annual Symposium*. Virtual, Nov, 2020