Qida (Jerry) Ma One Bear Place #97140, Waco, Texas 76798, USA · (515)770-8342 · mqdmjy123@gmail.com

Professional Experience

- **Baylor University** Waco, Texas, USA
  Graduate Teaching Assistant *June 2017 - Present*
  - Developed a heteroskedastic linear dimension reduction (HLDR) method to better classify state financial success with R. Evaluated different classification methods including QDA, KNN and Random Forest.
  - Proposed a "Sampling + Autoencoder" algorithm to numerically parameterize real varieties with R. Implemented Hamiltonian Monte Carlo methods, Homotopy endgames, Autoencoder Neural Network and Natural Cubic Splines with R (Stan and Keras/Tensorflow).
  - Deduced theoretical derivations for different types of confidence intervals for a poisson rate parameter with a misclassification nuisance parameter including Wald, score and integrated-likelihood methods. Conducted Monte Carlo simulations and real data example study with R.
- **CreditEase** Beijing, China
  Data Analyst *November 2014 - January 2017*
  - Designed and developed the first Auto Loan Credit Scoring system for classifying new customers into different levels based on their credit information with R, which used to support auto loan marketing.
  - Conducted dimension reduction and variable selections with different techniques including stepwise variable selection, LASSO, Ridge regression, Elastic Net, PCA, etc.
  - Evaluated different classification methods for the Credit Scoring system, including multinomial logistic regression, random forest, gradient boosting, etc.
  - Cleaned and manipulated P2P loan service datasets with millions of observations and thousands of features with SQL.
  - Designed and maintained monthly and seasonal risk reports with R.
  - Automated the generation and notification of daily risk reports for leadership reviews.

Articles

Q. Ma, J. Patrick, L. Njoh, and D. Young."Integrated-Likelihood-Ratio Confidence Intervals for a Poisson Rate Parameter and Misclassification Parameter Using Double Sampling." (Under peer review)

Q. Ma, J. Patrick, P. Young, D. Young, and L. Njoh. "A Double-Sampling Based Integrated-Likelihood-Ratio Confidence Interval for a Poisson Rate with Over- and Under-Counted Data." (In preparation)

Invited Presentations

Q. Ma and D. Kahle. "Parameterizing Varieties with Deep Learning." The 2nd Annual Meeting of SIAM Texas-Louisiana Section, Southern Methodist University, Dallas, Texas, USA, November 1–3, 2019.

Programming Skills

R, SQL, SAS(Certified Advanced Programmer), Python, Keras/Tensorflow, TEX/LATEX, JMP, Stan, BUGS

Education

- **Baylor University** Waco, Texas, USA
  Ph.D., Statistcs *June 2017 – Present (May 2021 Expected)*
- **Southern Methodist University** Dallas, Texas, USA
  M.S., Applied Statistics and Data Analytics *August 2012 – May 2014*
- **Zhejiang University** Hangzhou, Zhejiang, China
  B.S., Information and Computing Science *September 2008 – June 2012*