Yueqi Liu

yueqi.liu@uconn.edu | 860-931-9870 |

LinkedIn: www.linkedin.com/in/yueqiliu | GitHub: https://youqilaw.github.io/dsProjects/Index.html

Summary:

Experienced data analyst with solid skills in statistical modeling, data manipulation and data visualization. Proficient in supervised and unsupervised machine learning methods.

Education:

UNIVERSITY OF CONNECTICUT, STORRS, CT *08/2016-05/2018*

Master of Science, Statistics GPA: 3.8/4.0

***Relevant Coursework*:** Applied Statistics, Machine Learning (Supervised/ Unsupervised) in R, SAS & R data management, Applied Time Series, Mathematical Statistics, Statistical Consulting, Designed and Analysis of Experiments, Survival Analysis.

TAIYUAN UNIVERSITY OF TECHNOLOGY, TAIYUAN, CHINA *09/2012-07/2016*

Bachelor of Science, Statistics GPA: 3.5/4.0

Skills and Certification:

Computer: SAS, R, R shiny, Power BI, Python, SQL, A/B Testing, Linux, Hadoop, Excel **Certification:** SAS Advance Programming

Professional Experience:

Statistician

LLX Solutions LLC, Waltham, MA *07/2018 - Current*

- Conducting hypothesis testing and Survival Analysis (Kaplan-Meier & Cox Regression) method to analyze clinical data.
- Generating and validating standard analytical datasets based on statistical analysis plan along with data Specification.
- Producing data reports and data visualization including listings, tables, figures and analysis results using R, SAS and Power BI.
- Lead 5-people team to do data visualization and new-drug analysis for different clients and developed great presentation skills, excellent analytical and problem solving skills with the ability to work simultaneously in multiple tasks and teams.

2017 Travelers Case Competition (1st place in Storrs)

The Travelers Company, Hartford, CT *10/2017-01/2018*

- Conducted predictive modeling for identifying earlier cancel policies and detected key drivers of prior cancellation using R.
- Fitted GBM, random forest, logistic regression and neural network mode to accomplish predictive tasks.
- Implemented cross validation to prevent overfitting and evaluate model performance.
- Achieved a 0.74 AUC and presented business advice that helps the company to save $15M on unprofitable business.

xgBoost: New York City Taxi Fare Prediction

Department of Statistics, UConn, STORRS, CT *08/2018-09/2018*

- Created reasonable features to help to improve accuracy, including weather, airport pick/drop that cause additional charge.
- Created parallel computing to handle time consuming tasks, including cross validation and xgBoost parallel.
- Implemented xgBoost to conduct prediction with MSE = 3.2 ranking top 30% at KAGGLE competition.

Random Forest: Titanic Survival Prediction

Department of Statistics, UConn, STORRS, CT *04/2019-05/2019*

- Explored Titanic Datasets, imputed missing values in a different way and created new features to improve model performance.
- Fitted Random Forest, Logistic Regression and Elastic Net Regression with cross validation to predict survival probabilities.
- Visualized the partial dependency analysis to find how important features affect survival results based Random Forest model.
- Visualized interactive interface dashboard using R shiny to present people's survival probabilities based on their information.

Academic Projects:

Survival Analysis of Heart Failure Patients: Cox Regression

Department of Statistics, UConn, STORRS, CT *10/2017-12/2017*

- Developed a Cox regression model to estimate death rates due to heart failure and to investigate its link with major risk factors.
- Visualized the regression by Kaplan Meier plot to study the survival at different levels of factors: Ejection fraction and gender.
- Developed time-dependent ROC Curves to validate that the discrimination ability of the model is higher at longer follow up time.

Analysis of Energy Consumption of Buildings at the Storrs campus

Statistical Consulting Service, UConn, STORRS, CT *01/2017-05/2017*

- Hierarchically clustered buildings and fitted mixed regression model based on time series to forecast future consumption.
- Forecasted the energy consumption of different buildings of UCONN in following years and assisted clients to solve problems.
- Communicated with clients weekly on their requests, assisted the project leader to wrote and transmit reports to clients.