

Tiana Wu

EDUCATION

Brown University, Providence, RI 08/2018 - current

M.S. in Data Science

- Interdisciplinary training in computational statistics, machine learning and deep learning
- Relevant Coursework: probability and statistical modeling, advanced regression methods, time series and logistic regression, machine learning methods, R & Python programming, big data analysis and visualization

Urbana University, Ohio 07/2017

B.S. in Management Science, Business School

- Graduation with the highest distinction – **summa cum laude**
- Relevant Coursework: Investment Management, Risk Management, Applied Statistics, Introduction to Optimization, Mathematical Programming, Financial Management

Hohai University, China 07/2017

B.S. in Economics, College of International Business & Economics

- Graduation with **National Outstanding Academic Achievement Award** (the only recipient in the department)
- Relevant Coursework: Economics (Micro & Macro); Statistics; Advanced Econometrics; Operations Research and Optimization; Probability Theory and Mathematical Statistics; Intro to Computer Programming; Finance

PROGRAMMING & TECHNIQUE SKILLS

Python (Scikit-learn, Pandas, TensorFlow, Plotly, Seaborn, Matplotlib, Numpy); **R**; **SAS**; **Tableau**(Visualization); **SQL**; **Julia**; **Machine Learning**: SVM, KNN, Decision Tree etc; **Deep Learning**: Neural Networks; **Statistical Models**: Linear Regression, Generalized Linear Regression, Ridge Regression, Lasso Regression etc.); **Excel**

SCHOOL PROJECTS

Regression Project (Python, Tableau): Predicting 2018 Population Growth Rate by Country

- Collected, explored and cleaned 50 years' data of 8 features for 142 countries by integrating the data into dataframes.
- Outperformed the baseline model (previous year's actual values) with an improvement of 5.9% by using Time Series Model, K-Means Clustering +Time Series Model, Ridge Regression Model, and Mixed-effects regression model.
- Visualized data as interactive animated charts and world maps using Bokeh, Matplotlib and Tableau.

Machine Learning Project (Python): Predicting probability of default for consumer loans

- Collected loan data from lending club and commercial bank, performed feature generations
- Compared performance of various machine learning methods: KNN, SVM, Neural Networks, GBM
- Performed hyper parameter tuning and model accuracy (ROC) analysis

INDUSTRIAL EXPERIENCE

Data Scientist Intern **First Data Corporation**, Providence, RI 05/2019 - 08/2019

- Use proprietary credit card transaction big data and machine learning algorithms to identify visitor spending patterns
- Recommend a commercially-viable Government policy to promote local Tourism

Business Analytics Intern **Capital One Bank**, McLean, VA 06/2016 - 08/2016

Worked closely with data scientist on risk and profitability quantification of banking products

- Shadowed senior analyst to mine credit bureaus and US census data to target potential customers using Python and R
- Performed profitability and customer lifetime value (CLV) analysis of credit cards and mortgages
- Tested performance of logistic regression models used in customer behavioral analysis

Co-op in Commercial Lending Control & Analytics **Postal Savings Bank of China**, 01/2014 - 03/2015

Assisted credit manager in developing a hybrid (statistical and expert judgmental) risk scorecard model

- Cleaned and analyzed historical performance database of more than 12K commercial loans
- Ranked and weighted risk factors: industry segmentation, rate, loan size, debt coverage ratio, etc.
- Developed Pilot Test tool using VBA/Excel to measure model predictive power based on Gini ratio and AUC