# Mingzhu Ye

190 Davidson Rd Piscataway, NJ 08854

#### **EDUCATION**

Rutgers, the State University of New Jersey

M.S. in Statistics (GPA: 4.00/4.00)

Changchun, China

New Brunswick, NJ

Jilin University

M.S. in Development Economics (GPA: 3.92/4.00)

July 2014

December 2017

Jilin University

B.S. in Economics (GPA: 3.58/4.00)

Changchun, China

July 2012

### WORK EXPERIENCE

#### Compassionate Care Hospice

Operations Research Analyst, Part-time

Parsippany, NJ October 2016 - January 2017

- Collaborated with cross-functional teams extracting hospice-related data from MUMMS and SQL Server, transformed realtime hospice data into business insights.
- Assisted CFO analyzing company's expenditure and income, minimized expenditures to get the break even point, built prediction model whether patients will be in CAP to prevent overpaying.
- Built programs for analyzing patients related issues and staffs productivities across 38 company branches. Cross-checked analytic programs for reproducible projects and reported outputs in csv files and ggplot visualizations to CFO.
- My analysis on patients distribution helped predict the CAP problem of hospice industry, and analysis on staffs productivities problem helped the company realized averagely 25% of the staffs' service input documentations were delayed.

# Rutgers OIT - Enterprise Application Services

Data Analyst, Intern

Piscataway, NJ

- September 2015 September 2016
- Retrieved student systems data from Oracle Database using SQL and manipulated data into specific formats using.
- Participated in the research on optimizing the utilization rate of classrooms and my work was highly acclaimed.
- Independently designed optimization algorithm which resulted in at least 10,000 school bus trips saved and \$ 1000, 000 saved.
- Mounted Databricks cluster and AWS S3 bucket, performed big data analysis using Spark Databricks.
- Gathered all my findings into visualized report and presented it to both technical and non-technical audience.

FAW Car Co., Ltd.

Changchun, China

Product Analyst, Intern

January 2012 - March 2012

- Participated in the research of overseas pricing strategies for the car model B70.
- Analyzed car market structures and overseas car sales data with Mazda Revenue Management Model.
- Conducted research on car buying habits of different generations of customers from several marketing databases.

## TECHNICAL SKILLS

- Databases: SQLite, Oracle SQL Developer, RDBMS, SQL Server
- Programming Languages: Python, R, SAS, PL/SQL, Transact-SQL
- Visualization Tools: Tableau, Shiny, RStudio, Excel, LATEX, Markdown, Microsoft Office
- Statistics: Logistic Regression, MLM, Cluster Analysis, Categorical, PCA, GLMNET, LDA, Baysian, Experiment Design, ANOVA, Hypothesis, t-test, z-test, Tukey-test, Bonferroni-test, AICs, BICs

## NOTABLE COURSE PROJECTS

#### Tumor Classification Model

Rutgers University

Course: Data Interpretation II

March 2016 - May 2016

- PCA model and glmnet ensemble method were used to select significant 8 genes from 2308 genes pool.
- Built the glmnet-LDA model with selected 8 genes which predicted tumor types with high accuracy of 90%.

#### Statistical Inference for PSA Level

Rutgers University

December 2015

- Selected variables psa, cavol, weight, svi, cp and gleason for the Multi-Variate Linear Model (MLM).
- Built PSA MLM for prediction purpose and made inference for the model by AICs and BICs test.

### Logistic Model on Survival Rates of Titanic Passengers

Rutgers University November 2015

Course: Regression Analysis

- Manipulated the descriptive data and fitted a logistic regression with survival rate as response variable.
- Statistically significance between survival rate and different socio-economic standings was verified.

# Swiftkey N-Grams Model Text Mining Shiny App Data Science Specialization Capstone

Coursera August 2015

- Created N-Grams model for Next Word Prediction using RandomForest and Boosting algorithms.
- Deployed the N-Grams text mining model app on shinyapps.io.