# Bailu (Lucy) Yan

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### **EDUCATION**

#### SOUTHERN METHODIST UNIVERSITY (SMU)

Dallas, TX

## Master of Science in Applied Statistics and Data Analytics

Aug 2016 - May 2018

- Major Courses: Data Science, Experimental Statistics, Nonparametric Statistics, Lifetime Data Analysis, R, SAS
- Top 10% in academic performance among 30 students, got SAS Base and Advanced Programmer certificates

#### CENTRAL UNIVERSITY OF FINANCE AND ECONOMICS (CUFE)

Beijing, China

#### **Bachelor of Economics in Finance (Corporate Finance)**

Sep 2012 - Jul 2016

- Major Courses: Probability and Statistics, Mathematical Analysis, Risk Management, Investments, Corporate Finance
- Top 10% in both academic and professional practice performance, earned All-Round Development Scholarship

### PROFESSIONAL EXPERIENCES

FRUIT OF THE LOOM, INC.

Bowling Green, KY

Oct 2018 - Jul 2020

## **Intermediate Business Data Analyst**

- Collected sales, macro-economics, market sentiment data from retailer sites, NPD, FRED, USDA and Social Media (Twitter) through APIs, SQL databases, and open-source web scraping. Built data pipeline to automatically refresh, clean and store data internally to get prepared for advanced data analysis. Saved data extraction and management costs
- Improved store testing process and gave strategic suggestions. Created similar store groups and find test and control stores according to sales, geographic, and competitive features using clustering method (least squares, KNN), analyzed the impact of new products and marketing activities, compared strategic solutions to lower management cost
- Created methodology to forecast trend of futures price to reduce raw material procurement cost. Performed feature selection from potential futures price influencers (market trend, economics, etc.) using machine learning methods (Linear Regularization, PCA, Random Forest, etc.). Selected best prediction methods from time series and machine learning methods (ARIMA, Random Forest, GBM) using cross validation, gave procurement time suggestions
- Collaborated with sales and marketing to build methods for SKU optimization. Developed customized PCA models to
  estimate SKU contribution to total assortment, combined modeling results with SKU productivity and uniqueness, and
  gave SKU recommendations. Helped retain on average 70% sales for deletions, increased productivity and saved cost
- Built applications for corporate strategy and management. Created automated dashboards for sales, market price and
  incident tracking (COVID-19) with visuals of historical data, change rates, factor heatmaps, social media word cloud,
  and statistical predictions. Added interactive features to allow business users to get customized advanced analysis

#### SOUTHERN METHODIST UNIVERSITY

Dallas, TX

#### Data Analyst - Deason Criminal Justice Reform Center, Buried Alive Project

Oct 2017 - Sep 2018

- Collected, decoded, and cleaned the drug offender datasets and merged with demographics data using SAS and R
- Used Tableau to visualize data, generated reports to present key findings and changed data format for project website

## **Teaching Assistant - Statistical Computing Course**

Aug 2017 - May 2018

- Assisted in making video lectures to help develop statistical programing skills of SAS, R, SPSS, and Excel
- Held Q&A session for students on statistical modeling, hypothesis testing, and computing language

#### **Group Leader – Retail Site Selection for Slacks on Racks**

Mar 2017 - May 2017

• Gathered, cleaned, and merged large census datasets and sales datasets by SQL and SAS, created models using PCA, Lasso, Ridge Regression, and Random Forest to perform feature selection, predicted profits and selected best retail site

### DELOITTE CONSULTING (SHANGHAI) CO. LTD.

Beijing, China

#### SAP Intern (SAP Ariba & MDM)

Nov 2015 - May 2016 & Jun 2017 - Aug 2017

- Interviewed and summarized customer demands. Used Excel VBA to collect and clean raw data, inspected data quality and built data dictionary, assisted in defining master data standards and building system implementation blueprint
- Helped test system environment, prepared documents for key user training, and supported post go-live operations

### FEATURED SKILLS & ENDORSEMENTS

**Programming/Software** – R, SQL, SAS, Python, STATA, SPSS, SQL Server Database, Excel VBA, Power BI, Tableau **Modeling/Machine Learning** – Random Forests, GBM, PCA, Linear/Logistic Regression, Neural Networks, KNN, KDA