# Jiamin (Viola) Zhong

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## **EDUCATION**

## Georgetown University M.S. in Data Science and Analytics

May 2021

• Leadership: TA for Optimization and for Data Science, Graduate International Orientation Ambassador

University of Illinois at Urbana-Champaign B.S. in Mathematics and Statistics, Business Minor Dec 2017

• Coursework: Linear Algebra, Numerical Analysis, Corporate Finance, Principles of Marketing

## WORK EXPERIENCE

## MoSeeker Inc., Python Engineer, Shanghai, China

Aug 2018-Dec 2018

- Trained Unigram and Bigram Part of Speech Tagger with Hidden Markov Model(HMM) based language model with accuracy of 98%
- Increased accuracy of job recommendation lists by 7% after translating English job descriptions paragraph by paragraph, instead of word by word, using Baidu dictionary API
- Developed Python script for Client Success team to mark if applications match job descriptions accordingly
- Collaborated with AI recommendation team to collect negative samples of jobs that users viewed but didn't apply for, analyzed and visualized the results of A/B test

### ABC-CA Fund Management, Risk Analyst Intern, Shanghai, China

April 2018-June 2018

- Researched portfolio performance measurement models (especially campisi framework) and prepared risk management consultation by analyzing a database of financial reports from Wind System by SQL
- Created rate of return charts to compare monthly and yearly performance of 10+ fund management companies using VBA
- Delivered the Financial Risk Management section of annual report by surveying profiles of 120+ fund management firms, and authored the English version of Company Year 2018 Risk Management Policy

#### Illinois Geometry Lab, Student Scholar, Urbana, IL

Aug 2017-Dec 2017

- Explored the properties of functions that automata recognized and investigated the extent of complexity of functions corresponding to automata
- Concluded that a continuous function is Hölder continuous for log base  $\beta_1$  of  $\beta_2$  if it is regular
- Illustrated that Hilbert curve is regular by finding an automaton which recognizes it

## Sociètè Gènèrale China Branch, Credit Analyst Intern, Wuhan, China

Dec 2016-Jan 2017

- Validated credit risks for a loan project by developing Logistics Regression Models using R and utilized cross validation method to calculate accuracy of predictions
- Conducted fraud investigation and represented the team to communicate with clients and institutions
- Assessed the property condition of the enterprise according to the financial statements

# **PROJECTS**

## Machine Learning and Statistical Modeling on Event Attendance in New York (Python)

- Collected and cleaned 20,000+ events/businesses data with total of 10+ attributes by Yelp API and fetched transition data with 17 attributes within 1km to the events by Here Nearby Stations API
- Identified multi-dimensional outliers with LOF algorithm followed by implementing topic modeling, hypothesis testing, cluster analysis and predictive analysis with 5 classification models
- Introduced association rules using aprori algorithm with 3 support levels to detect relations between factors and popularity of events

## Exploration Data Analysis and Predictive Modeling on Employee Turnover (R)

- Evaluated accuracy of predicting turnover rate with random forest/logistic classifier/tree models based on human resource dataset
- Applied variable importance plots of predictors from the HR dataset with three models to analyze the factors that affect turnover rate

#### Comparison of Campus Crime with Crime in the Surrounding City (SAS)

- Merged and cleaned on-campus arrest dataset from 2009-2011 with FBI crime records dataset in 2010 by states and created new variables to compare and determine the extent of safety
- Generated income data set which has median income data for each state and analyzed how income levels of each state correlate with crime rate by CORR Procedure

## PERSONAL SKILLS

• Languages: Python, SQL • Software: R, MatLab, SAS • Cloud Platform: AWS(EC2, EMR)