

# Jiamin (Viola) Zhong

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## EDUCATION

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- 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

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- 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
- Société Générale, 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

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- 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 transportation 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

## SKILLS

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