Zhaopeng Liu

M.S in Data Science - Courant Institute of Mathematical Sciences - NYU

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SKILLS -

Language: Proficient: Python, R, SAS, MySQL, SQL, Matlab **Intermediate:** Tableau, RShiny, C, C++, MapReduce **Software**: Jupyter Notebook, Spark(PySpark), Hadoop, Microsoft Excel, MongoDB, Eclipse, Latex

EDUCATION -

Master of Science in Data Science, New York University

• Courses: Machine Learning for Data Science, Risk & Portfolio Management, Programming for Data Science(Python), Advanced Python programming, Big Data(Hadoop,Spark)

New York, NY May 2018, First-Year

Bachelor of Science in Statistics, Minor in CS/Math, University of Illinois at Urbana-Champaign

- Courses: Data Mining, Data Structure, Stochastic Process, Advanced Data Analysis(SAS), Statistical Data Management(SAS), Programming with Java, Categorical Data Analysis
- Dean's List, Graduate with Highest Distinction, Tau Sigma National Honor Society

Champaign, IL May 2016, Completed GPA: 3.80 Major: 3.96

– Work Experience —

Shotaki Inc: Data Scientist, Intern

- Built Countvectorizer-based classifier of emotions for unlabeled online comments classification, measured how popular is a product and assist with decision making
- Visualized sale prediction with Tableau (BI Dashboard tool) to get a straightforward view of products' sale trends by geography, therefore to help the company adjust strategy in time

New York, NY Sep 2016 – Dec 2016

Beijing, China Jun 2016 – Aug 2016

Medici Quantitative Investment: Algorithm Trading Programmer, Intern

- Loaded the real-time options market trading data on tick level and stored them in MongoDB
- Created a prototype of Chinese options trading on tick level and implemented it with python, tested the program on copper trading using windows server and profited 2% in two weeks
- Created performance report panel including Shapiro, return indexes for Chinese ETFs market with Shiny on Rstudio to help customers choose their preferred ETFs with a clearer view

Beijing, China

Agricultural Bank of China: Financial Report Analyst, Intern

- Validated balance sheet with Microsoft Excel to ensure they are correct and up-to-date
- Conducted data processing, including handling missing data and incorrect format

Jun 2015 – Aug 2015

New York, NY Oct 2016 – Dec 2016

RESEARCH EXPERIENCE

Spam Email Detection System: NYU Data Science Course Final Project

- Parsed raw email data in text format to word tokens using Count Vectorizer in Scikit-Learn module.
- Built models with ML algorithm Naïve Bayes, Decision Tree, Logistic Regression and Random Forest
- Applied penalty factors and created evaluation metrics that focus on minimizing false positive rate
- Performed feature, parameter selection to improve the model, the final model has AUC=0.95 on test data

Airbnb New User Bookings Competition on Kaggle.com: UIUC Data Mining Course Final Project

- Conducted Data cleaning with R and PCA to decreasing the dimension of the data using SAS 9
- Applied machine learning methods like Naive Bayes, Random Forest, Logistics Regression to predict the most possible traveling destinations of new users on Airbnb, based on their profile detail
- Conducted selection on features to improve the prediction accuracy to over 0.77 on test data

Equity Portfolio Optimization and Back Testing: NYU Risk & Portfolio Course Project

- Constructed a portfolio based on global minimal variance method and estimated portfolio covariance matrix with PCA regression in Matlab
- Expected returns with shrinkage estimator towards CAPM equilibrium in Matlab
- Evaluated the back-test results and could provide analytical report for customer's portfolio with return, shapiro and volatility index on 1-year, 3-year, 5-year period

1st Prize, Contemporary Undergraduate Mathematical Contest in Modeling: Team Leader

- Developed fast dynamic programming algorithm for restoring straight-cut and cross-cut pdf files.
- Converted choppered pieces into Grayscale picture and matrix with each element between 0-255
- Won 1st Prize in Beijing, among more than 5000 participants

Champaign, IL Jan 2015 – May 2015

New York, NY Jan 2015 – Aug 2015

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Beijing, China

Sep 2013 – May 2014