SIYU (SYLVIA) YAN

Apt# 3-2E, 600 Warren Road | Ithaca, NY 14850 | (510) 333-8276 | sy527@cornell.edu

OBJECTIVE: Seeking challenging full-time job opportunities using quantitative data analytics skills.

EDUCATION

CORNELL UNIVERSITY, College of Engineering **Ithaca, NY**
MASTER OF PROFESSIONAL STUDIES in Statistical Science Aug. 2014-May 2015
Specialization: Bayesian Statistics, Database Management, Data Mining, Functional Data Analysis, Machine Learning, Stochastic Processes, Times Series Analysis, etc.

UNIVERSITY OF CALIFORNIA, BERKELEY **Berkeley, CA**
BACHELOR OF ARTS in Economics and Statistics Aug. 2009-Dec. 2012

- *Academics*: Major GPA: Economics 3.55; Statistics 3.51
- *Honors*: Omicron Delta Epsilon, Beta Chapter, the International Economics Honor Society 2011-Present
- *Leadership:* Campaign team leader for ASUC's 2010 election, managing a 10 people campaign team for Executive Vice President candidate of Student Action Party, resulting in 300 votes.
- *Teamwork:* Facilitator of the 2011 Dean's Team Training Program, organizing a four workshops' training program for 20 students in cooperation with another facilitator.

ACADEMIC PROJECTS

CORNELL UNIVERSITY| Ithaca, NY
MPS Project-Testing Fundamental Analysis Strategies Jan. 2015-May 2015

- Export historic fundamental data on company components of S&P 1500 Composite Index from Bloomberg Terminal.
- Build parametric and non-parametric statistical models such as Rolling Forecast model, Generative Additive Model, Random Forest Model, etc. for stocks' scoring system.
- Back test the best scoring system selected from k-fold cross validation on historical data on an as of basis to reproduce the scores.
- Perform portfolio optimization on stocks pre-filtered by scoring system in G-sphere.
- Profit and loss analysis on portfolio's wealth on different market events.

U.S. Congressional Floor Debates Classification Mar. 2015

- Classify 2740 speeches into for and against groups based on sentimental analysis.
- Classify 2740 speeches into 38 groups based on debates' topics.
- Use random projection to reduce dimension of speech features and implement unsupervised clustering methods such as k-means, single-link, spectral clustering and canonical correlation analysis on training data in Python.
- Achieve 100% accuracy rate in the first task and 95% accuracy rate in the second task on test data.

Data Science Club Project Sep. 2014-Dec.2014

- Implement KNN, Decision Tree, Random Forest and SVM Machine Learning algorithms to learn and predict F-1 Teams' and Drivers' Performance.

UNIVERSITY OF CALIFORNIA, BERKELEY | Berkeley, CA
Bayesian Seminar Class Project Sep. 2012-Nov. 2012

- Estimate the probability that Mr. Obama wins the 2012 Presidential Election of United States.
- Methods include Bayesian logistic regression model, Monte Carlo Markov Chain method, etc.

WORKING EXPERIENCE

CALIFORNIA ACTUARIAL CONSULTANTS | San Ramon, CA Apr. 2013-Jan. 2014
Pension Actuarial Analyst

- Provide actuarial consulting and pension administrative service for the existing 60+ clients.
- Provide ad-hoc query support using MS Access and Excel.
- Run annual actuarial valuation reports in compliance with internal guidance of existing clients' pension plans using Actuarial Systems Corporation software.
- Calculate pension benefits for terminated participants in the retirement plans.
- Help design customized cost-effective retirement plans for potential clients and create multiple scenarios to make comparison.

SKILLS AND CERTIFICATIONS

Certification: **SOA Actuarial Exams:** Pass all SOA preliminary exams and VEE courses are satisfied.
SAS Base Programming Certification; **SAS Advanced Programming Certification** is expected.
Technical Skills: MATLAB, Python, R, SAS, SQL and STATA.
Language Skills: Fluent in English, Mandarin and Intermediate French.