

Lichao Liu

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EXPERIENCE	Citizens Bank, Boston, MA February 2014 – Present Quantitative Analyst in Operational Risk Management <ul style="list-style-type: none">● Initiate to study the underlying risk indicators for external fraud and litigation losses from macroeconomic and internal strategy perspectives.● Develop an loss analytics dashboard for risk oversight with SQL, Tableau, R and python● Use text mining technique to study the customer complaints and the correlation with litigation losses● Estimate the Basel II operational risk AMA economic capital with VaR-based LDA approach● Lead the Federal Reserve required CCAR operational risk loss forecasting implementation and model development with GLM models
	Philips Research Center, Briarcliff Manor, NY September 2013 – December 2013 Data Mining Analyst <ul style="list-style-type: none">● Process, organize and construct massive clinical dataset on Hadoop clusters● Implement the feature selections with optimized Random Forest algorithm on Mahout● Design patient data segmentation with Decision Tree CART algorithm with RHadoop● Run statistical inference test to identify the patterns among the data and transfer the statistical findings into qualitative recommendations
	Barclays, New York, NY June 2013 – August 2013 Credit Risk Modeling Summer Analyst <ul style="list-style-type: none">● Developed a loan underwriting model for the modeling contest with a top 10% result● Initiated Basel II Probability of Default calibration model with time series and post model adjustment to increase model accuracy by 20%● Designed and implemented Basel II Pillar 1 stress testing with time series regression, forecasted the portfolio risk for next 5 years and summarized under different scenarios
	Aon Hewitt, New York, NY June 2011 – August 2011 Health & Benefits Actuarial Intern <ul style="list-style-type: none">● Contributed to 5 medical insurance pricing projects with historical medical claims● Improved pricing efficiency by optimizing VBA model of an over 200,000 medical claims and 100 healthcare plans project
EDUCATION	Columbia University in the City of New York December 2013 Master of Arts in Statistics CFA Level 1 Passed, FRM Part 1 Passed University of North Carolina at Chapel Hill May 2012 Bachelor of Science in Mathematical Decision Science Minor in Business
SKILL	Programming Skills: SQL, MATLAB®; Java; Python; Linux; Hadoop