**Zongjie:**

**Risk:**

* Energetic and result driven Quantitative Analyst with 3+ years' work experience in Quantitative Analysis, Data Manipulation, Risk Management, Statistical Model Development and Implementation. Specialized in using financial mathematical models and tools to conduct quantitative analytics with SAS, SQL, Python, R, MATLAB, C++, VBA.
* Certified Financial Risk Manager (FRM); SAS Certified Advanced and Base Programmer.
* Actively seeking for full-time position in financial fields with focus on quantitative analytics and risk management.

**DS:**

* Energetic and result driven Quantitative Analyst with 3+ years' work experience in Quantitative Analysis, Business Intelligence, Statistical and Financial Modelling. Specialized in using statistical models and tools to conduct quantitative analytics with Python, SQL, SAS, R, MATLAB, C++, VBA.
* Actively seeking for full-time position in technology and financial fields with focus on quantitative analytics, data science, and business intelligence.

**JIAOYU:**

**Risk:**

**Johns Hopkins University Baltimore, MD**

**Master of Science in Financial Mathematics** (GPA: 3.6/4.0) **Aug 2014 – May 2016**

* Relevant Courses: Financial Derivatives, Risk Management, Time Series Analysis, Stochastic Calculus, Financial Computing in C++, Structured Finance, Interest Rate and Credit Derivatives, Optimization in Finance, Machine Learning.

**University of California, Los Angeles Los Angeles, CA**

**Exchange Program in Statistics and Management** (GPA: 3.8/4.0) **2013 – 2014**

* Relevant Courses: Mathematical Statistics, Real Estate Finance and Investment, Principles of Accounting.

**Sun Yat-Sen University Guangzhou, China**

**Bachelor of Science in Mathematics and Computer Science** (GPA: 3.82/4.0) **2010 – 2014**

* Relevant Courses: Mathematical Analysis, Partial Differential Equations, Numerical Analysis, Multivariate Statistics, Mathematical Models, Programming Languages(C/C++), Data Structure and Algorithms.
* Awards: The First-Class Scholarship based on academic performance (top 5%), 2012 – 2013;

Merit Student Leader, 2011 – 2012; Honorable Mention in Mathematical Contest in Modeling (MCM), 2013.

**DS:**

**Johns Hopkins University Baltimore, MD**

**Master of Science in Applied Mathematics and Statistics** (GPA: 3.6/4.0) **Aug 2014 – May 2016**

Relevant Courses: Financial Derivatives, Risk Management, Time Series Analysis, Stochastic Calculus, Financial Computing in C++, Structured Finance, Interest Rate and Credit Derivatives, Optimization in Finance, Machine Learning.

**University of California, Los Angeles Los Angeles, CA**

**Exchange Program in Statistics and Management** (GPA: 3.8/4.0) **2013 – 2014**

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* Awards: The First-Class Scholarship based on academic performance (top 5%), 2012 – 2013;

Merit Student Leader, 2011 – 2012; Honorable Mention in Mathematical Contest in Modeling (MCM), 2013.

**Gongzuo Jingli**

Migrated the commercial credit risk model from Excel VBA to SAS for a regional BHC, participated

in PD, LGD, and EAD model developing, and independently developed LGD back testing, loss

forecasting model and Champion/Challenger model integration process.

• Researched on various clustering detection methodology, created one approach based on the

reciprocal of distance between each exceptions and helped in identifying the cluster level of

portfolios

Developed and applied advance risk management techniques to identify risk in the commercial portfolio, identified adverse changes and made recommendations based on current quality and projected economic conditions

Major contributor for developing CCAR commercial credit loss forecasting model

Responsible for building and enhancing Capital Adequacy processes in support of forecasted capital stress testing components under US Federal CCAR and DFAST regulation

Working on bank’s existing CCAR modeling methodologies, leads development and achievement of financial objectives for wholesale, retail credit model, operational risk, investment and PPNR challenger analysis

Analyze Credit and PPNR model results, and determine the resulting capital implications of key modeling assumptions and limitations

Support delivery of senior management and regulatory reports, dashboards and ad hoc requests involving stress models

**Original:**

**Santander Holdings Boston, MA**

**CCAR Quantitative Analyst Nov 2016 to Now**

* Implemented loss forecasting models to support the Federal Reserve’s CCAR and the Office of Comptroller of Currency’s DFAST
* Updated:

**Santander Bank Boston, MA**

**Senior Quantitative Analyst Nov 2016 to Now**

**Risk**

* Developed and implemented statistical loss forecasting models to predict PD, LGD, and EAD using logistic regression model in Python and SAS for Bank's $30 billion commercial portfolio.
* Developed a Python Model-View-Controller (MVC) framework for model implementation that reduced implementation time from 2 to 3 months to two weeks, increased robustness through extensive unit testing, input parameter validation and version control and reduced execution time by approximately 80%.
* Migrated the loss forecasting model from Excel VBA to Python and SAS platform, and executed CCAR/DFAST stress tests under Federal Reserve’s regulation on a semi-annual basis.
* Visualized the key risk drivers and performed sensitivity analysis for model review, and put together model performance reports for management and external audience including Federal Reserve and OCC.
* Coordinated closely with model developers and business department to discuss model methodologies and results, and worked with IT department to gather and validate necessary inputs for model execution.
* Conducted User Acceptance Testing (UAT) for implementation results with multiple stakeholders to make sure its compliance with the business requirements.

**DS**

* Developed and implemented statistical loss forecasting models to predict probability of default (PD) using logistic regression model in Python and SAS for Bank's $30 billion commercial portfolio.
* Developed a Python Model-View-Controller (MVC) framework for model implementation that reduced implementation time from 2 to 3 months to two weeks, increased robustness through extensive unit testing, input parameter validation and version control and reduced execution time by approximately 80%.
* Migrated the loss forecasting model from Excel VBA to Python and SAS platform, and executed CCAR/DFAST stress tests under Federal Reserve’s regulation on a semi-annual basis.
* Visualized the key risk drivers and performed sensitivity analysis for model performance review, and put together reports for management and external audience including Federal Reserve and OCC.
* Coordinated closely with model developers and business department to discuss model methodologies and results, and worked with IT department to gather and validate necessary inputs for model execution.
* Conducted User Acceptance Testing (UAT) for implementation results with multiple stakeholders to make sure its compliance with the business requirements.

**Original:**

**PI Analytics Baltimore, MD**

**Quantitative Research Analyst May 2015 to Dec 2015**

* Collected Mortgage-Backed Securities Fund data using Bloomberg terminal, and researched on the default and prepayment components from 38 million mortgage loans data of Fannie Mae and Freddie Mac using SQL and SAS, and built an R package to develop multinomial logistic regression models for pricing and risk managing these loans
* Used R and Python packages to conduct data analysis and visualization of 15-year Wells Fargo wholesale deposit data used in CCAR, and analyzed correlation of deposit data between Wells Fargo and other bank holding companies
* Updated:

**PI Analytics Baltimore, MD**

**Quantitative Research Analyst May 2016 to Nov 2016**

* Collected Mortgage-Backed Securities data using Bloomberg terminal, and researched on the default and prepayment components from 38 million mortgage loans data of Fannie Mae and Freddie Mac using SQL and SAS, and built an R package to develop multinomial logistic regression models for pricing and risk managing these loans
* Used R and Python packages to conduct data analysis and visualization of 15-year Wells Fargo wholesale deposit data used in CCAR, and analyzed correlation of deposit data between Wells Fargo and other bank holding companies

**The People’s Bank of China-Beijing Headquarters Beijing, China**

**Data Analyst, Survey and Statistics Department Jun 2013 to Sep 2013**

* Utilized ARIMA, seasonal decomposition, and other advanced time series analysis techniques to forecast banks’ deposit
* Implemented interest rate models using C++ for scenario analysis to detect and manage interest rate risk

**HSBC Bank Company Limited Guangzhou, China**

**Financial Analyst, Strategic Transaction Department Jul 2012 to Sep 2012**

* Conducted research on various commodities markets within the energy and metals sectors and performed data analysis by using SAS and SQL in support of the internal commodities fund and risk management
* Developed quantitative methods using Python to model the features in energy market for derivative trading strategies

**PROJECT EXPERIENCE**

**Stock Price Prediction Modeling Based on Machine Learning Methods Nov 2012 to Jun 2014**

* Researched on machine learning methods for stock price prediction and built models using Matlab to compare the forecast accuracy and convergence speed between methods of BP Neural Network and Support Vector Machine (SVM)
* Published two papers about the research approaches and results in core journals of finance