**Yu (Alex) FU**

* Passed CFA level II
* Programming: C++, Java, SQL, R, Python, MATLAB, Mathematica, data analysis, algorithm optimization

**Working Experience**

**Industrial and Commercial Bank of China (ICBC)**. New York 07/2018 – Present

*Risk Management Analyst Intern*

* Developed VBA tool for reconciliation of liquidity risk report, report procedure completeness improved.
* Validated VBA tool for market risk data quality checking, accuracy improved.
* Summarized a reconciliation procedure manual as an instruction for tool users and a reference source for human examination.
* Proposed an automated risk reporting procedure, to reduce operational risk of manual manipulation.
* Documented data issues and presented data adjustment plans to senior risk managers.
* Participated monthly Risk Committee meetings and provided concise notes with proper translations.

**MSCI Inc.** Boston 07/2017 – 09/2017

*Risk and Analytical Research Intern*

* Validated and compared algorithms of incremental VaR models with historical data to ensure robustness of incremental market risk statistics in the product, RiskMetrics, for customer use.
* Analyzed financial health and corporate governance from collected information in annual reports, investor presentations, and press releases of China A-shares companies.
* Verified industry classification of business segmentations of China A-shares companies according to GICS and SIC codes; reported data to index team to add China A-shares into Emerging Markets Index.

**Tebon Fund Management Co., Ltd / Subsidiary of Fosun International**. Shanghai 07/2015 – 08/2015

*Portfolio Manager Assistant Intern*

* Analyzed option values of structured funds through a C++ Monte Carlo estimator.
* Assisted portfolio manager’s structured fund products research.
* Traveled with supervisor to clients to ease concern about fund performance in a Chinese stock market turbulence to maintain long-term client relationships

**Academic Experience**

**Independent Python Project**. New York 05/2018 – 06/2018

*Research Assistant*

* Developed a loan pricing model for CCAR sensitivity and forecasting analysis under guidance of a Goldman Sachs mentor
* Specified general loan pricing factors, e.g.: credit spreads, discount rates, and funding rates
* Tested loan model price sensitivity to discount rates and credit spreads, and created DV01/CS01 by tenor reports
* Created revenue projection on simulated loan portfolios under multiple scenarios

**Illinois Geometry Lab**. University of Illinois at Urbana Champaign 09/2014 – 05/2015

*Research Assistant*

* Implemented interactive visual interface of Fourier series random walks in Mathematica and Latex
* Optimized visualization algorithm from 10 minutes to 0.3 seconds for big data computations
* Presented the research in front of 60 attendees on Seminar “Statistics: From Big Data to Big Decisions” at Rose-Hulman Institute of Technology Undergraduate Mathematics Conference, April 2015

**Department of Computer Science**. University of Illinois at Urbana Champaign 09/2014 – 05/2015

*Course Assistant*

* Prepared and taught two weekly lab sessions for the course Introduction to Computer Science
* Offered office hours to help students understand complex concepts and debug machine problems in Java

**Education**

**M.S. Mathematical Finance**. [GPA 3.52] Boston, MA 01/2018

*Boston University, Questrom School of Business*

* Coursework: Stochastic Methods of Asset Pricing, Credit Risk, Advanced Computational Methods, Programming (C++), Algorithmic and High-Frequency Trading (MATLAB), Fixed Income Securities

**B.S. Mathematics**. [GPA 3.88] Champaign, IL 05/2015

*University of Illinois at Urbana Champaign*

* Coursework: Data Structure (C++), Database Systems (SQL), Numerical Method I (Python)