## **JENNIFER E YOON**

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#### **PROFILE**

Data Scientist with Python coding skills and extensive financial industry experience

### **PROJECTS**

Website: Created a data science projects website to showcase my work (http://datasciy.com).

Stack Overflow: Received 670 points for my answers on Python and Excel VBA. Helped new users with Python libraries.

#### **TECHNICAL SKILLS**

Machine Learning: (1) deep learning, convolutional neural networks (CNN), stochastic gradient descent, stochastic processes, Monte Carlo methods, image recognition, data augmentation, transfer learning; (2) classification, clustering, decision trees, random forest, regression, recommender system, support vector machine (SVM), principal component analysis (PCA)

Software: Python (core, NumPy, Pandas, Matplotlib, Scikit-Learn, PyTorch, Jupyter), Linux bash, Git & Github, Amazon AWS

Business Intelligence (BI) tools: Excel, VBA, SQL

### QUANTITATIVE EXPERIENCE

Owner: 10 Sigma Risk LLC 2011-Present

Client, Crescat Capital LLC: Provided derivatives trading and risk control services. Provided operational risk services and helped write a marketing brochure. Monitored portfolio risk using Bloomberg PORT application. (May 2014 – April 2016, Nov. – Dec. 2012)

# Senior Manager: KPMG LLP 1997-2001

- Assisted a diversified energy company calculate the correct risk and develop an appropriate VaR (Value-at-Risk) model for their spread trading portfolio. Used numerical approximation methods to custom fit a bimodal (two humps) probability density function to their energy trading data. Helped apply results to VaR model's risk calculations. As a result, Client was able to secure a \$5 billion debt.
- Wrote VBA code to calculate loss from excessive trading (from bid-ask spread and fees). Supervised
  a team to develop supporting arguments and analyses used by lawyers. As a result, Client was able
  to settle a \$128 million lawsuit for \$50 million.

# Financial Analyst, Economist: SEC

1992-1996

- Calculated on behalf of the SEC, the potential risk on MBS (mortgage-backed securities) trading
  portfolios at large, U.S. banks. Received data files from each firm, wrote computer code to
  transform and clean the data, then conducted statistical analyses.
- Approved the risk controls on a \$20 billion Salomon Brothers portfolio because their hedge risk stayed within the company's risk tolerance.
- Spotted a \$500 million potential loss on Merrill Lynch's portfolio, which was beyond their risk tolerance. The company's Director of Risk Management disputed my calculations, but the company ended up reporting a loss of about \$500 million 6 months later.
- Made significant contributions to SEC's regulatory policy on MBS and other derivatives.

## **EDUCATION & CERTIFICATION**

Global Association of Risk Professionals (GARP) 2011 FRM

Certified Financial Risk Manager

University of Chicago, Booth School of Business 1992 MBA

M.B.A., Finance and Statistics concentrations

Mount Holyoke College 1986 BA

B.A., Economics major, Physics and Music minors, High Honors in Economics