

## JENNIFER E YOON

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### PROFILE

Python Data Scientist with extensive experience in derivative securities trading and risk management.

### PROJECTS

**Project:** Working on Amazon Rainforest deep learning project using geospatial and satellite images from Planet Labs.

**Website:** Created a data science website (<http://datasciY.com>) to showcase my projects.

**Stack Overflow:** Received 700+ points for my answers on Python and controlling Excel VBA with Python.

### TECHNICAL SKILLS

**Machine Learning:** (1) deep learning (CNN), geospatial & satellite image analysis, face recognition, multi-class image classification (2) regression models, random forest, boosting and bagging, recommender systems, feature extraction

**Math & Statistics:** Monte Carlo methods, numerical methods, probability, linear algebra, statistics, econometrics, time-series

**Software:** Python (core, NumPy, Pandas, Matplotlib, Scikit-Learn, PyTorch, Fastai, TensorFlow, Keras)

**Environments:** Linux, Bash, Github, Google Colab, Amazon AWS, Visual Studio Code, Jupyter Notebook/Lab

**Business Intelligence (BI):** Excel, VBA, SQL, R, Bloomberg Terminal

### 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 portfolio 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 impact to SEC's regulatory policy on MBS, options, swaps 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*