

JENNIFER E YOON

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<http://datasciY.com> | <https://github.com/JennEYoon> | [stack overflow: jennifer-yoon](https://stackoverflow.com/users/1044444/jennifer-yoon) | [linked in: JenniferYoon](#)

PROFILE

Data scientist with a strong statistics and econometrics knowledge and financial industry experience.

SELECTED PROJECTS

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

Stack Overflow: Received 655 points for my answers on Python and Excel questions. Helped new users with Python concepts.

TECHNICAL SKILLS

Machine Learning: classification, clustering, decision trees, principal component analysis (PCA), support vector machine (SVM), cross-validation, ensemble method, Monte Carlo methods, regression, time series, convolutional neural networks (CNN)

Software and Tools: Python (NumPy, Pandas, Matplotlib, Scikit-learn, PyTorch, Jupyter), R, SQL, Linux (WSL), Excel VBA, AWS

Selected Coursework: Econometrics, Time Series, Statistics, Probability, Calculus, Linear Algebra, Numerical Methods, Partial Differential Equations (PDE), Stochastic Calculus

QUANTITATIVE EXPERIENCE

Examples of past success doing quantitative analysis on large datasets.

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 Professional. (August 2014 – April 2016, Nov - Dec 2012)

Senior Manager: KPMG LLP

1997-2001

- Assisted a diversified energy company in calculating the correct risk on their spread trading portfolio. Used numerical approximation methods to custom fit a bimodal (two humps) probability density function to their energy trading data. As a result, the client was able to secure a \$5 billion debt.
- Wrote VBA code to calculate loss from excessive trading (from bid-ask spread and fees). As a result, the 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

University of Chicago, Booth School of Business
M.B.A., Finance and Statistics concentrations

1992 M.B.A.

Mount Holyoke College
B.A., Economics major, Physics and Music minors, *High Honors in Economics*

1986 B.A.

Global Association of Risk Professionals (GARP), Certified Financial Risk Manager (FRM)

2011 FRM