# Jennifer E. Yoon

Tel: (516) 610-0707 Leesburg, VA 20176 datasciY.info@gmail.com http://datasciY.com

#### **Professional Profile**

Data Analyst and Data Scientist with extensive financial industry experience.

- Significant statistics and econometrics experience from courses and real-world applications.
- Excellent client communication skills and an experienced instructor of non-technical customers.
- Python: standard library, Pandas, NumPy, Matplotlib, Scikit-learn, and PyTorch
- R: several MOOC courses on programming and statistical learning
- SQL databases: working experience supplemented by MOOC courses
- Web development: HTML5 and CSS3
- Shell & Cloud: Unix (WSL), Git and Github, conda, Amazon AWS, Google Colab, and Jupyter hub
- Other software: C++, Excel VBA, assembly, Intel 8088, and Bloomberg Professional

# **Professional Accomplishments**

Examples of past success doing quantitative analysis on large datasets.

- 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 historical 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, client was able to settle a \$128 million lawsuit for \$50 million.
- 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.

#### **Experience**

Owner (self-employed), 10 Sigma Risk LLC, Leesburg, VA, 2011 – present CEO and Co-founder, StockWiki Inc, Palo Alto, CA, 2007 – 2010

Database Consultant, Empower-Visa Services Inc., Fairfax, VA, 2001-2008

Senior Manager, KPMG LLP, Washington, D.C., 1997-2001

Senior Derivatives Analyst, NERA, White Plains, NY 1996-1997

Financial Analyst, Economist, SEC, Washington, D.C, 1992-1996

#### **Education**

M.B.A., University of Chicago, Booth School of Business, Chicago, ILB.A., Mount Holyoke College, South Hadley, MACertified FRM, GARP (Global Association of Risk Professionals)

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# **Math and Statistics Classes:**

ordinary differential equations (ODE), partial differential equations (PDE), stochastic calculus (SDE), vector calculus, calculus, linear algebra, numerical methods, applied probability, mathematical biostatistics, statistics, time-series, and econometrics

#### **References**

Brandon Becker, former Director, Market Regulations, SEC; Washington, D.C. Linda Smith, Chief Operations Officer, Crescat Capital LLC, Denver, CO Kevin Smith, Chief Investments Officer & CEO, Crescat Capital LLC, Denver, CO

# **Work Permit**

I am a U.S. Citizen. I am fully authorized to work in the United States.