

Yogesh Malhotra, PhD, MSQF, MSCS, MSNCS, MSAcc, MBAEco, BE, CEng, CISSP, CISA, CEH, SAS
Who's Who in America®, *Who's Who in the World®*, *Who's Who in Finance & Industry®*, *Who's Who in Science & Engineering®*
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 WWW: www.yogeshmalhotra.com, www.linkedin.com/in/yogeshmalhotra Citizenship: United States of America
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SUMMARY

- **Invited Quant Research Presentation, Princeton Quant Trading Conference, Princeton University**, April 4, 2015.
- **Quantitative Finance & Quantitative Risk Modeling Research: 24 SSRN Top-10 Paper rankings**, Jan-May, 2015.
 Advanced Risk Modeling Tools & Statistical Techniques, Advanced Econometrics & Time Series Models, Market Risk, Credit Risk, Liquidity Risk, Capital Markets, Derivatives, Portfolio Construction & Optimization Models, Volatility Models, VaR, ARCH, GARCH, Multifactor Pricing Models, Bayesian Inference, Markov Chain Monte Carlo Models, Cyber Risk.
- **Wall Street Investment Banks Project Leaderships of Risk Modeling & Analysis for Banks with \$1 Trillion AUM:**
 - **JP Morgan Private Bank** Multi-Asset Portfolio Fund of Funds with \$500-600 Billion AUM, Midtown Manhattan.
 - **Mentor: JP Morgan Global Head of Quantitative Research & Analytics and US Head of Portfolio Construction**
 - **Goldman Sachs Alumnus' Asset Management Firm** with \$400-500 Billion AUM, Midtown Manhattan.
- Project Leader, JP Morgan Private Bank Portfolio Construction & Optimization Liquidity Assessment Framework, reporting to and guiding Global Head of Quantitative Research & Analytics, US Head of Portfolio Construction and team.
- Project Leader, Goldman Sachs alumnus' asset management firm, High Frequency Econometric Modeling of Co-integrated Time Series and Liquidity Microstructure Modeling reporting to and guiding Sr. VP/Portfolio Manager and team.
- Equity Portfolio & Risk Management Strategist, developed Financial Risk Analytics with 200 market data sources, did 3,500 equity trades in double-digit million US\$ of 250 companies using technical, fundamental, structural analysis.
- Prior Banking & Finance Analytical & Modeling Project Leaderships for Bank of America, Las Vegas; Crédit Agricole CIB, Hong Kong Govt. Treasury Management; Wells Fargo, and, Big-3 IT for Global Financial Systems of worldwide banks.
- Founder, Risk Analytics Ventures with clients & patrons such as Goldman Sachs, Google, IBM, Intel, Microsoft, Harvard.
- Carnegie Mellon & Kellogg Executive Education faculty; Quantitative Methods Professor at Syracuse University; Keynote Speaker for UN Global Assets Modeling Expert Panel & World Governments; NSF Computer Scientists Expert Panels.
- 20-year PhD & Post-PhD experience in Statistics, Probability, Econometrics, Quantitative Finance, Operations Research, Computer Science, Cryptography, Encryption models & algorithms such as Regressions, Structural Equations, VaR, ES, EVT, ARCH/GARCH, Machine Learning, Data Mining, Bayesian Inference, Markov Chain Monte Carlo Models.
- 20-year PhD & Post-PhD experience in data analysis tools, data sources, analysis queries and procedures applied using SPSS, SAS, MATLAB, AMOS, PLS, LISREL, C++, MS-Excel, VBA, Bloomberg, etc.; 100+ Quantitative Statistical & Structural Model Validation Reviews: Top Academic Empirical Journals: *Best Reviewer Award*, Academy of Management.
- 15-year Post-PhD Statistical Modeling & Analysis Research: Research recognized as '*exemplar of considerable impact on actual practice*' on Model Risk Management Practices, AACSB International Impact of Research Report. Impact evident in US Federal Reserve & Office of Comptroller of Currency Model Risk guidance: SR11-7 & OCC 2011-12.
- Led Team of 200 PhDs including Senior Professors from Top Business Schools to publish High Impact Research.
- Media Interviews & Coverage: Wall Street Journal, New York Times, Fortune, Forbes, CIO, Fast Company, Inc., etc.
- Top-10 Quantitative Modeling PhD Computer Scientist Chartered Engineer: Double Doctorate in Statistics & IT, Top-14 MS Quantitative Finance (Applied Math), MS Computer Science/Computational Finance, MS Network & Computer Security/Quantitative Finance, MBA Quantitative Economics, MS Accountancy, BE Mechanical Engg., UC Berkeley MFE & Kellogg PRMIA Risk Management Executive Education, SAS Certified, MATLAB Certified, Unix and C Certified.

EDUCATION

Post-Doctoral Quantitative Finance Risk Modeling Thesis; Doctoral Quantitative Risk Management Thesis.
PhD Double Doctorate in IT and Statistics, University of Pittsburgh Top-10 PhD *Full Scholarship* 1993 – 1998
PhD Courses in Quantitative Methods, Carnegie Mellon University *Full Scholarship* 1994 – 1995
Master of Financial Engineering Executive Education, University of California Berkeley 2010 – 2011
MS Quantitative Finance, Derivatives, Fordham University, Midtown Manhattan Top-14 MS Finance 2011 – 2012
MS Computer Science, Computational Quantitative Finance Models, AI & Modeling, Algorithms 2012 – 2013
MS Network-Computer Security, Quantitative Finance Models, Bayesian Inference, MCMC Models 2013 – 2015
MS Accountancy/Finance, Asset Pricing, Capital Markets, Risk Management 2009 – 2010
MBA Quantitative Economics, Advanced Statistics, Econometrics, Optimization *Full Scholarship* 1991 – 1993
Other: BE with Distinction Chartered Engineer, SAS Certified, MATLAB Certified, Unix & C Certified, CISSP, CISA, CEH.

EXPERIENCE

- Chief Research Scientist, Computational & Quantitative Risk Management** 08/2013 – Present
Global Risk Management Network, LLC, Cornell Business & Technology Park, Central New York, NY.
- Chief Research Scientist, Quantitative Finance & Quantitative Risk Modeling** 05/2009 – 08/2013
Global Risk Management Network, LLC Venture Capital projects funded Finance-IT-Risk Management Ventures.
Venture Capital projects including JP Morgan Private Bank, Goldman Sachs Alumnus' Asset Management Firm, NY.
- Project Leader, JP Morgan Portfolio Construction, Optimization & Stress Testing** 03/2012 – 08/2012
JP Morgan Private Bank, JP Morgan \$500-600 Billion Fund of Funds, Midtown Manhattan, NY.
- Project Leader, JP Morgan Portfolio Liquidity Risk Modeling Framework** 03/2012 – 08/2012
JP Morgan Private Bank, JP Morgan \$500-600 Billion Fund of Funds, Midtown Manhattan, NY.
- Project Leader, Hedge Fund Quantitative Finance & Financial Risk Modeling** 02/2012 – 08/2012
Goldman Sachs Alumnus' \$400-500 Billion Asset Management Firm, Midtown Manhattan, NY.
- Founder, Executive Director & Portfolio Strategist, Investment Management & Risk Analytics** 08/1998 – 10/2010
Global Risk Management Network, LLC, Fort Lauderdale, FL, Central New York, NY
Clients/Patrons: Goldman Sachs, Google, Harvard, IBM, Intel, Microsoft, NSF, MIT, NASA, UN, etc.
- Associate Professor & Assistant Professor of Quantitative Methods** 08/2001 – 06/2009
Quantitative Risk & Financial Modeling MBA IT/OR Faculty, Syracuse University, Syracuse, NY.
- Global CxO Risk Management Advisory Management Consulting Practice** 08/1998 – 03/2006
Big Banks, Intel Corp., British Telecom (UK), US/World Governments; USA, N. America, Europe, Asia.
- Assistant Professor of Information Technology & Operations Research** 08/1998 – 07/2001
Quantitative Risk Modeling Research, MIS Faculty, Florida Atlantic University, Ft. Lauderdale, FL.
- Quantitative Risk Modeling Top-10 PhD Research Fellowship** 08/1993 – 07/1998
University of Pittsburgh Katz Graduate School of Business, UPMC, Pittsburgh, PA.

Prior project leaderships for Bank of America, Las Vegas; Crédit Agricole CIB, Hong Kong Govt. Treasury Management; Wells Fargo, and, Big-3 IT for Global Financial Systems as – Site Leader for Models Quality Assurance and Systems Integration, Team Leader of Teams of Banking Senior Analysts and Analysts, and, Management Advisor to CIOs.

ROLES & RESPONSIBILITIES

- Chief Research Scientist, Computational & Quantitative Risk Management** 08/2013 – Present
Global Risk Management Network, LLC, Cornell Business & Technology Park, Central New York, NY.

Advanced Risk Modeling Tools & Statistical Techniques, Advanced Econometrics & Time Series Models, Bayesian Inference, Markov Chain Monte Carlo Models, Capital Markets, Derivatives, Portfolio Construction & Optimization Models, Volatility Models, VaR, ARCH, GARCH, Multifactor Pricing Models, Market Risk, Credit Risk, Liquidity Risk, Cyber Risk, Cyber Risk Insurance.

- Ongoing advancement upon Wall Street Investment Banking Asset Management & Hedge Fund Risk Modeling projects and prior research recognized by AACSB International for Impact of Research recognized as '*exemplar of considerable impact on actual practice*' on Model Risk Management Practices, continues leading global practices of Risk Management.

- Princeton Quant Trading Conference, Princeton University: Invited Research Presentation.
- Sponsors: Princeton University Bendheim Center & ORFE, Citadel, KCG, Apr 4, 2015.

- SSRN Top-10 Papers: 24 Top-10 Rankings in Finance and Risk Analytics, Jan-May 2015:

05/2015

Econometrics: Mathematical Methods & Programming eJournal
Computational Techniques

Information Systems & Economics eJournal

04/2015

Econometrics: Mathematical Methods & Programming eJournal
Computational Techniques

03/2015

Econometric Modeling: Capital Markets - Risk eJournal
Econometric Modeling: Risk Management eJournal
Econometric Modeling: Capital Markets - Risk eJournal
Operations Research Network eJournal
OPER Subject Matter eJournal
Systemic Risk
Econometrics: Mathematical Methods & Programming eJournal

02/2015

Stochastic Models eJournal
Computational Techniques
OPER: Analytical
Other Econometrics: Mathematical Methods & Programming
Econometric & Statistical Methods - Special Topics eJournal
Microeconomics: Decision-Making under Risk & Uncertainty eJournal
VaR Value-at-Risk
Uncertainty & Risk Modeling
Econometric & Statistical Methods

01/2015

Econometric Modeling: Capital Markets - Risk eJournal
Microeconomics: Decision-Making under Risk & Uncertainty eJournal
Uncertainty & Risk Modeling
VaR Value-at-Risk

Chief Research Scientist, Quantitative Finance & Quantitative Risk Modeling

05/2009 – 08/2013

- Led, managed, and advised multiple research teams of analysts, senior analysts, and directors on research projects.

Venture Capital, JP Morgan Private Bank, Goldman Sachs Alumnus' Asset Management Firm, NY.
Global Risk Management Network, LLC Venture Capital funded Finance-IT-Risk Management Ventures.

Algorithms, Machine Learning, Quantitative Finance, Quantitative Risk Modeling.

Mentor: Dr. James R Lothian, Macroeconomist-Econometrician, Distinguished Professor of Finance, Fordham.

Technologies: SAS, MATLAB, C++, MS-Excel, VBA, Bloomberg, NYSE-TAQ, CRSP

Project Leader, Venture Capital Projects, Wall Street Investment Bank Projects, Manhattan

- Liquidity Risk, Market Risk & Credit Risk Modeling, Portfolio Liquidity Risk Optimization
- Hedge Fund Risk Modeling, Trading & Hedging Strategies for Maximizing Alpha

Market Risk Models

Linear and Multivariate Time Series Models, Volatility Models, ARCH/GARCH, MLE, Portfolio VaR, QMLE, Non-Normality, Cornish-Fisher, Extreme Value Theory (EVT), Expected Shortfall (ES), Coherent/Spectral Risk Measures, Weighted/Filtered/Historical Simulation, Monte Carlo, Backtesting VaRs/ES, Stress Testing, Basel II/III

Credit Risk Models

Probability of Default (PD), Loss Given Default (LGD), Expected Default Frequency (EDF), Basel II/III, Exposure at Default (EAD), Worst Case Default Rate (WCDR), Risk Weighted Assets (RWA), Counterparty Risk, CreditMetrics, KMV, VaR, Credit Valuation Adjustment (CVA), Credit Default Swaps, Default Probabilities, Gaussian Copula, Simulations, Large Portfolio Approximation, Stress Testing

Interest Rate Derivatives Models

Simulations, Tree Models, Calibrations; Continuous Time, CIR, Vasicek, Merton, Hull-White, BDT, & HJM Models; Bond Options, Treasuries, Coupon Bonds, Caplets, Floorlets, Swap Contracts, Bond Risk Premia, Yield Curve, Markov Regime Switching

Equity Portfolio Models

Derivatives, Efficient Portfolios, CAPM, Multi-Factor Pricing Models, Present Value Models, Passive/Active Portfolio Performance, Cross-Sectional Returns, Asset Allocation, Risky/Risk-Free Portfolios, Diversification, Risk Pooling, Anomalies, Dividend Discount/Growth Models

Fixed Income Portfolio Models

Bond Valuations, Derivatives, Yields, Term Structure, Credit Spread, Credit Risky Bonds, Interest Rate Risk, Portfolio Performance, Passive/Active/Liability Funding, Hedging, Swaps, Forwards, Futures, ABS, MBS.

Project Leader, JP Morgan Portfolio Construction, Optimization & Stress Testing

03/2012 – 08/2012

JP Morgan Private Bank, JP Morgan \$500-600 Billion Fund of Funds, Midtown Manhattan, NY.

JP Morgan (JPM) Hands-On Team Leadership Project

Mentor: Dr. Georgiy Zhikharev, JP Morgan Global Head of Quantitative Research & Analytics,
JP Morgan US Head of Portfolio Construction.

Portfolio Construction & Optimization and Stress Testing

Technologies: MATLAB, SAS, C++, MS-Excel, VBA, Bloomberg

Alternative Investments, Hedge Funds, Equities, Commodities, Fixed Income, Bonds, Currencies

Asset Pricing, Risk Management, Liquidity Risk, Market Risk, Credit Risk, ALM Risk, Portfolio Risk, Investment Risk, Non-Normality, Non-Linearity.

Led quantitative portfolio liquidity modeling for \$500B fund-of-funds & hedge funds (HF).

Led literature review of all liquidity risk models, methods, and measures.

Led project management & scheduling and delivering high quality results on time.

Led interpretations of all outcomes and presentations to Quants, CIO, MD, PM.

Assets: alternatives, HF, equities, commodities, fixed income, bonds, currencies.

Analyzed market risk, credit risk, ALM risk, portfolio risk, investment risk.

Led modeling and stress-testing for all asset classes and composite portfolio.

Led validation of all liquidity and liquidity risk models and measures.

Led verification of model performance, limiting behaviors, responses to stress.

Led modeling of pricing & risk measurement with specific focus on liquidity.

Led evaluation of third-party models, data, software for diverse asset classes.

Led inventorying of model assumptions and assessment of model risks for all assets.

Modeled historical simulation, parametric & modified VaR, expected shortfall.

Modeled and analyzed multi-asset volatility, variances & correlations, GARCH, MLE.

Modeled VaR, QMLE, non-normality, Cornish-Fisher, EVT stochastic models for assets.

Modeled and analyzed liquidity risk models for all assets and portfolio optimization.

Identified & defined benchmark indices & data sources for all asset classes.

Assessed soundness of liquidity & liquidity risk models for assets & portfolio.

Project Leader, JP Morgan Portfolio Liquidity Risk Modeling Framework

03/2012 – 08/2012

JP Morgan Private Bank, JP Morgan \$500-600 Billion Fund of Funds, Midtown Manhattan, NY.

JP Morgan (JPM) Hands-On Team Leadership Projects Leader

JP Morgan Portfolio Liquidity Assessment Framework Development Leader

Mentor: JPM Global Head of Quantitative Research & Analytics, JPM US Head of Portfolio Construction: JPM Top-4 Leadership ED in Global Financial Crisis Management, Harvard Case Study.

Advised: Team of Senior EDs/MDs, Portfolio Managers, Quants.

JP Morgan Portfolio Construction & Optimization Liquidity Assessment Framework

Asset Pricing, Risk Management, Liquidity Risk, Market Risk, Credit Risk, ALM Risk, Portfolio Risk, Investment Risk, Non-Normality, Non-Linearity. MATLAB, SAS, C++, MS-Excel, VBA, Bloomberg.

Developed Large Equities, Developed Small Equities, Emerging Equity, Unlisted Equity,

Various Commodities,
 Government Bonds, Investment Grade Bonds, Inflation-Linked Bonds, High Yield Corporate Bonds, Emerging Market
 Hard Currency Bonds, Emerging Market Local Currency Bonds,
 Major Currencies,
 Statistical Arbitrage Hedge Funds, Equity Hedge Hedge Funds, Merger Arbitrage Hedge Funds, Macro Hedge Funds,
 Relative Value Hedge Funds.

17-Asset Class Portfolio Liquidity Assessment & Stress Testing Research & Analysis

Technical Framework & Project Management Foundation:

Exhaustive Review of Recent 25-Years of Liquidity Measurement Research
 in Academic, Policy, and Practice Literatures:

Technical Liquidity Risk Models, Methods, & Measures Research:

~5,000 documents ~ 60,000 pages

Project Leader, Hedge Fund Quantitative Finance & Financial Risk Modeling

02/2012 – 08/2012

Goldman Sachs Alumnus' \$400-500 Billion Asset Management Firm, Midtown Manhattan, NY.

Project: Hedge Fund Quantitative Finance & Quantitative Risk Modeling

Goldman Sachs Alumnus' \$400 Billion+ Asset Management Firm.

Mentor: Wall Street SVP Hedge Fund Manager with Top Wall Street Investment Banks:

Mr. Eric Yeh, Wall Street Hedge Fund SVP/PM.

Firm: Top Wall Street Investment Bank launched by a Goldman Sachs alumnus with \$400 billion to \$500 billion AUM at the time of the project.

SAS High Frequency Econometric Modeling of Market Microstructure

400 State Street Associate Trading Strategies Analysis for Alpha and Risk

Hedge Fund Performance Analysis

Quantitative Finance, Quantitative Risk Modeling of Liquidity as Price Impact.

Analyzed 400 Finance & Economics Empirical Research Papers on Alpha Trading Strategies.

Replicated /Analyzed Large Scale Data HF Econometrics Models of Market Microstructure.

Critical Review of State Street Associates Quarterly Scan Trading Strategies.

High Frequency Econometrics Models of Trade Price Impact & Market Microstructure.

Researched Co-Integrated Time Series for Ultra-High Frequency Tick-and-Quote (TAQ) Data.

Presented and Taught VARMAX Models of Co-Integrated Time Series for HF Econometrics.

Analysis: Why Existing 'Alpha' Research Is Insufficient for Profitable Hedge Fund Asset Management.

Founder, Executive Director & Portfolio Strategist, Investment Management & Risk Analytics 08/1998 – 10/2010

Global Risk Management Network, LLC, Fort Lauderdale, FL, Central New York, NY

Clients/Patrons: Goldman Sachs, Google, Harvard, IBM, Intel, Microsoft, NSF, MIT, NASA, UN, etc.

Incorporated as BRINT Institute, Florida State LLC in 1998; M& A and New York State LLC in 2001.

- Developed and managed a global virtual community of Risk practice of 130,000 social network members.

Founding Chairman & Chief Knowledge Architect (CEO/CIO/CTO)

- Portfolio & Risk Management Strategist, Financial Risk Analytics

- Execution & Risk Management of Long/Short Equity Trades

- 3,500 Buy/Sell Transactions in Double-Digit Million US\$

- Equity Trades of 250 Companies across Diverse Sectors

- Technical/Fundamental/Structural Analysis

- Using Aggregated Data from 200 Market Data Sources.

- Development of Financial Risk Analytics Technologies

- Development Technologies: Unix, CGI, Perl, MySQL, PHP, C++, etc.

Financial Modeling, Time Series Modeling, Structural Equation Modeling

SAS, SPSS, MATLAB, MS-Excel, VBA, AMOS, PLS, Compustat, WRDS, CRSP.

- Founder, Global CxO ventures on Risk Management of Financial Risks,
 Systemic Risks, Strategic Risks, Operational Risks, Enterprise Risks.

* Award-winning Global Risk Management Ventures with

CxOs patrons, clients and 'word of mouth' reviewers such as:

Goldman Sachs, Google, Harvard, HP, IBM, Intel, Microsoft, MIT, NASA, Princeton, Wells Fargo, Wharton, World Bank.

* Research influence evident in SR11-7 and OCC 2011-12 Model Risk Management Guidance of OCC and US Federal Reserve System such as anticipation of unknown risks by effective challenge of models.

- Executive Director, Risk Management for the New Finance ventures
- Pioneered Global Uncertainty & Risk Management Practices
- Globally Accepted Framework for Risk Management of 'Black Swans'
- CxO Users Sample: U.S. AFRL/Army/Navy/Air Force/NASA CxOs.

Associate Professor & Assistant Professor of Quantitative Methods

08/2001 – 06/2009

Quantitative Risk & Financial Modeling MBA IT/OR Faculty, Syracuse University, Syracuse, NY.

- Assistant Professor of Quantitative Methods, 2001-2008: Promoted to Associate Professor, 02/2008.
- Named as "exemplar" of "considerable impact on actual practice" on Model Risk Management Practices
- AACSB International Impact of Research Report, 2008.
- United Nations HQ Global Macroeconomists Expert Panel & Expert Keynote, 2003.
- United Nations HQ Macroeconomic Assets Measurement Invited Expert Paper, 2003.
- CNet Networks Corporate Computing Award for Most Influential Research, 2002.
- Institute for Supply Management Global Membership Expert Interview, 2002.
- National Science Foundation: 32 National CyberSecurity Expert Panels, 2002-2005
- Fulbright Invitation for Fulbright-Queen's University Visiting Research Chair, 2005.
- Recognized by SU Chancellor & President as Exemplar of Serving the Public Good, 2005.

- Quantitative Risk Modeling Research Project Manager
- * Published Quantitative Risk Models in Top Journals
- Developed Quantitative Models applied by Big Banks & NASA.
- Multivariate Regression & Structural Equation Models
- ACM, IEEE, Top-2 MIS Research Journals.
- * Model Reviewer for 100+ Most Rigorous Model Reviews of Multiple Models influencing Global Research & Practice as Technical Reviewer, Tier-1 ACM, IEEE, Research Journals
- Academy of Management Best Reviewer Award, Quantitative Structural Models
- * Mathematical Statistical Risk & Financial Modeling with: MS-Excel, VBA, MATLAB, SPSS, SAS, AMOS, PLS
- * Mathematical Optimization Models such as Stock Options & Currencies Monte Carlo Simulations with MS-Excel Solver, Pivot Tables, Macros, VBA, Crystal Ball, MS-Access / SQL.

- Financial Modeling Research MBA Faculty & Instructor,
- * Taught Advanced Mathematical Optimization Models of Profit Maximization & Cost Minimization with MS-Excel/VBA: To Computer Scientists, Engineers, Project Managers, MBAs
- On Linear Programming, Sensitivity Analysis, Network Modeling, Dynamic Programming, Integer Linear Programming.

Global CxO Risk Management Advisory Management Consulting Practice

08/1998 – 03/2006

Big Banks, Intel Corp., British Telecom (UK), US/World Governments; USA, N. America, Europe, Asia.

- Developed and managed a team of 200 PhD experts to publish and disseminate high impact research.

- Global CxO Risk Management Advisory & Consulting Practice.
- \$100 Billion Firms, European Banks, Silicon Valley VCs & CEOs, US & World Governments.
- Carnegie Mellon & Kellogg: Invited Executive Education Faculty.
- Research Lectures: INSEAD (France), Queen's (Canada).
- Intel Corp.: Invited Advisor on Next Generation e-Business Architectures.
- British Telecom (UK): Global Vision Thought Leadership for SME Client Firms.
- Philips - Netherlands: Invited Advisor to Head of Firm on Global Corporate Strategy.
- European Bank Merger – Corporate Strategy; Fortune 100 CIOs: Corporate Strategy.

- Global Industry Practice Leader on Digital Assets, Markets & Exchanges
- * Project Leader for Global Research Team of 200 for High Impact Research: CxOs, PhD Industry Experts, Top Business Professors & Deans.
- * Advanced Global Enterprise Risk, Operational Risk, Systemic Risk Practices
- * Pioneered Global Practices on Systemic, Strategic, Enterprise Risk Management
- * Pioneered Global Integration of e-Business & Knowledge Management Models.

- Intel Next Generation e-Business Architectures Invited Expert Paper, 2001.
- Ziff Davis Global Standard of Internet Commerce co-Founding Editor, 1999.
- GII National CxO practice building advancing on influential doctoral NII Research.
- GII (Global Information Infrastructure), NII (National Information Infrastructure)

- South Korea National Vision Maeil TV National Broadcast Interview, Seoul, S. Korea, 2000.
- South Korea National Vision Korea Campaign Plenary Keynote, Seoul, S. Korea, 2000.
- Among Ikujiro Nonaka, Hubert Saint-Onge, Charles Lucier (Booze Allen)
- Silicon Valley Plenary Keynotes to Venture Capitalists & Tech CEOs, 1999, 2000.
- Government of Mexico Plenary Keynote to Parliament & Cabinet, Mexico City, Mexico, 1999.
- Conference Board Malcolm Baldrige National Award CxO US Quality Council Keynote Speaker, 1998.

Assistant Professor of Information Technology & Operations Research

08/1998 – 07/2001

Quantitative Risk Modeling Research, MIS Faculty, Florida Atlantic University, Ft. Lauderdale, FL.

- Global R&D Rankings: Most Influential KM Frameworks of Risk Management.
- Published Quantitative Risk Models in Top Conferences & Journals.
- Ranked in Top-3 Global Scholar-Practitioners in Knowledge Management among:
 - Ikujiro Nonaka, Professor of Knowledge, UC Berkeley
 - Tom Davenport, Partner, Accenture.
- Drexel University Survey of Global Impact on Knowledge Management, 2000

- Quantitative Risk Modeling Research Project Manager
- * Published Most Influential Papers on Quantitative Risk Models
- Developed Quantitative Models of Risk and Controls.
- Multivariate Regression & Structural Equation Models.
- * Model Reviewer for Top Research Journals and Proceedings.
- * Mathematical Statistical & Structural Equation Modeling with: MS-Excel, VBA, MATLAB, SPSS, SAS, AMOS, PLS

Quantitative Risk Modeling Top-10 PhD Research Fellowship

08/1993 – 07/1998

University of Pittsburgh Katz Graduate School of Business, UPMC, Pittsburgh, PA.

- Founder & Developer of World's Top-Ranked Web Site, Top-3 Search Engine, and Top-10 Social Network.

- UPMC Expert Advisor to Top MDs and CIOs Office, 1995-1998.
- University of Pittsburgh College of Business Lecturer, 1997-1998.
- Government of Netherlands Invited Expert Advisor, Parliament & Cabinet, 1998.
- Computerworld Internet Forecast World's Best Web Site Award, 1997.
- Carnegie Mellon: Industry.Net National Awards, Top-3 Search Engine, 1996.

- PhD Thesis on Quantitative Models of Risk Management
- * Invited for Research Fellowship by Pitt University Professor
- Top-10 Founder of MIS & Pioneer of IT Strategy
- 'Top-10' IT-Statistics-Quantitative Methods PhD Program.
- * Completed 2x credit load required for PhD
- ~ 45 Credits: Statistics & Quantitative Methods
- ~ 45 Credits: IT & Quantitative Risk Management
- Quantitative Methods QPA: 3.96/4.00, Overall GPA: 3.9/4.0.

- Quantitative Risk Modeling Empirical Research Focus
- Multivariate Regression Modeling
- Quantitative Models of Risk Management
- Structural Equation Modeling

Statistical Multivariate Regressions
Partial Least Squares Regressions.

PUBLICATIONS

- Research ranked among Nobel laureates and distinguished professors from institutions such as Harvard University in prestigious industry surveys, scientific impact studies, and, scientific citation analysis studies by top institutions. Impact of research recognized among 'exemplars' of 'considerable impact on actual practice' in the AACSB International Impact of Research Report, 2008. CNet Networks Corporate Computing Award for Most Influential Research, 2002. Recent papers:

- **Quantitative Finance & Quantitative Risk Modeling Research: 24 SSRN Top-10 Paper rankings**, Jan-May, 2015. Advanced Risk Modeling Tools & Statistical Techniques, Advanced Econometrics & Time Series Models, Bayesian Inference, Markov Chain Monte Carlo Models, Capital Markets, Derivatives, Portfolio Construction & Optimization Models, Volatility Models, VaR, ARCH, GARCH, Multifactor Pricing Models, Market Risk, Credit Risk, Liquidity Risk, Cyber Risk, Cyber Risk Insurance.

Malhotra, Yogesh. [Beyond 'Bayesian vs. VaR' Dilemma to Empirical Model Risk Management: How to Manage Risk \(After Risk Management Has Failed\) for Hedge Funds](#). (Based upon JP Morgan Risk Modeling Project for \$500-600B AUM)

SSRN Top-10 Paper Rankings:

Econometric Modeling: Capital Markets - Risk eJournal: March 2015.

Econometric Modeling: Capital Markets - Risk eJournal: January 2015.

Microeconomics: Decision-Making under Risk & Uncertainty eJournal: January 2015.

Uncertainty & Risk Modeling (Topic): January 2015.

VaR Value-at-Risk (Topic): January 2015.

Malhotra, Yogesh. [Risk, Uncertainty, and Profit for the Cyber Era: Model Risk Management of Cyber Insurance Models Using Quantitative Finance and Advanced Analytics](#) (Advancing upon above JP Morgan Risk Modeling Project)

Available at SSRN: <http://ssrn.com/abstract=2553547>.

Post-Doctoral Thesis, 189 Pages, 145 References, 208 Footnotes, Submitted Date: January 19, 2015.

Advisory Committee of Senior Mathematicians, Physicists, & Computer Scientists including DoD AFRL Senior Scientists.

SSRN Top-10 Paper Rankings:

Econometric Modeling: Risk Management eJournal: March 2015.

Econometric Modeling: Capital Markets - Risk eJournal: March 2015.

Econometric & Statistical Methods - Special Topics eJournal: February 2015.

Microeconomics: Decision-Making under Risk & Uncertainty eJournal: February 2015.

VaR Value-at-Risk (Topic): February 2015.

ERN: Uncertainty & Risk Modeling (Topic): February 2015.

ERN: Econometric & Statistical Methods (Topic): February 2015.

Malhotra, Yogesh. [Markov Chain Monte Carlo Models, Gibbs Sampling & Metropolis Algorithm for High-Dimensionality Complex Stochastic Problems](#). (Advancing upon above JP Morgan Risk Modeling Project)

SSRN Top-10 Paper Rankings:

MRN Operations Research Network eJournal: March 2015.

OPER Subject Matter eJournal: March 2015.

Systemic Risk (Topic): March 2015.

Econometrics: Mathematical Methods & Programming eJournal: March 2015.

Computational Techniques (Topic): February 2015.

OPER: Analytical (Topic): February 2015.

ERN: Other Econometrics: Mathematical Methods & Programming (Topic): February 2015.

Stochastic Models eJournal: February 2015

List of other publications and working papers accessible at: <http://www.yogeshmalhotra.com/publications.html>.

HONORS & AWARDS

Research & practices ranked and profiled in scientific impact studies, global business press, and industry surveys among Finance & Information Science Nobel laureates and distinguished professors from institutions such as Harvard University.

- *CNet Networks* Corporate Computing Award, Most Influential Research
- *Intel Corporation* Next Generation IT Architectures Invited Expert Paper
- *National Science Foundation* National Computer Scientists Expert Panels
- *Academy of Management*, Best Reviewer Award for Quantitative Modeling Best Paper

Awards, interviews & editorial reviews for developed Finance-IT-Risk ventures as CIO benchmarks in global press such as *Wall Street Journal*, *New York Times*, *Fortune*, *Forbes*, *Business Week*, *CIO*, *Computerworld*, *Information Week*, etc.

- *Carnegie Mellon: Industry.Net Online Achievement Awards*, Top-3 Web Search Engine
- *Computerworld* Internet Forecast *Best Web Site Award*
- *Top 10 Social Networks Awards and Rankings* among others such as LinkedIn
- *Ziff Davis* Global Standard of Internet Commerce co-Founding Editor

Selected for biographical profiles among worldwide leaders and achievers from both the USA and the world in: *Marquis Who's Who in America*®, *Who's Who in the World*®, *Who's Who in Finance & Industry*®, *Who's Who in Science & Engineering*®.

- *US & World Governments and Parliaments, United Nations*, Invited Advisor & Keynote Speaker.

STATISTICAL, MATHEMATICAL, & QUANTITATIVE FINANCE MODELING PROJECTS

Algorithms: Graph Models, Dynamic & Linear Programming, Computational Complexity
 Algorithms: Social Networks-Game Theory-Nash Equilibrium-Financial Markets Models
 Algorithms: Mathematical Models of Automata, Computability & Formal Languages
 Algorithms: Computational Mathematical Models of Cryptography & Encryption Protocols
 Bayesian Inference and Markov Chain Monte Carlo Models with Value-at-Risk (VaR) Models
 C++11 Concurrency & Multi-threading, Machine Learning, & AI Neural Network Models
 C++ Mathematical Finance Derivatives Pricing & Software Engineering Algorithms
 C++ Design Patterns Financial Programming for Derivatives & Options Pricing
 C++ Programming for Financial Engineers Course, University of California Berkeley
 Cybersecurity-Signal Processing: Cryptography, Finance Protocols, Information Assurance
 MATLAB Advanced Financial Econometrics Markov Chain & Monte Carlo Models
 MATLAB Market Risk, Credit Risk, Volatility, VaR, ARCH, GARCH, EVT, ES Model
 MATLAB/MS-Excel/C++ Credit Risk Management & Credit Risk Derivatives Models
 MATLAB Stocks and Equity Portfolio Management & Equity Derivatives Models
 MATLAB Continuous Time Interest Rates, Yield Curve, Fixed Income Derivatives Models
 MATLAB Stochastic Numerical Methods & Mathematics for Quantitative Finance
 MATLAB Artificial Intelligence-Machine Learning-Fuzzy Logic-Chaotic Time Series Models
 MATLAB Advanced Finance Portfolio Theory, CAPM & APT Matrix Algebra Models
 MS-Excel Market Risk, Credit Risk, Volatility Models, VaR, ARCH, GARCH, EVT, ES Models
 MS-Excel/VBA Hedge Fund Statistical Risk/Returns, Asset Pricing, Market Risk Models
 MS-Excel/VBA Fixed Income Portfolio Management & Fixed Income Derivatives Models
 MS-Excel/VBA Advanced Quantitative Models of Utility Theory & Portfolio Management
 MS-Excel/VBA Advanced Statistical, Financial Econometrics & Optimization Models
 MS-Excel/VBA/ACL Advanced Financial: Accounting, Auditing, Taxation Research
 MS-Excel/VBA/Solver Operations Research & Network Programming Models
 MS-Excel/VBA/Solver Finance, Investments, Accounting Decision Models
 Qualitative Survey Research Methods in Organizational Controls & Compliance Analysis
 SAS Advanced Programming, SAS SQL Processing & SAS Macro Programming Courses
 SAS Large Scale Data Models of High-Frequency Econometrics & Market Microstructure
 SAS Advanced Quantitative Models of Macroeconomics & Microeconomics Analysis
 SAS/SPSS Statistical Analysis of Variance (ANOVA) & Co-Variance (ANCOVA) Models
 SAS/SPSS Applied Multivariate Analysis & Applied Regression Analysis Models
 SAS/SPSS Correlation, Multivariate Regression & Inferential Statistics Models
 SAS/SPSS Quantitative Statistical Structural Equation Models in Behavioral Science
 SAS/SPSS Quantitative Statistical Methods in IT, Organizations & Social Sciences
 Statistics for Financial Engineers Course, University of California Berkeley
 Statistical Multivariate Regression Models of Risk Management, Controls & Compliance
 Statistical Structural Equation Models of Risk Management, Controls & Compliance

MS QUANTITATIVE FINANCE & PHD (STATISTICS SPECIALIZATION) COURSES

FORDHAM UNIVERSITY: MS QUANTITATIVE FINANCE, 53 CREDITS

Top-14 MS Finance Specialty, US News & World Report

APPLIED MATH: DERIVATIVES: QUANTITATIVE FINANCE & QUANTITATIVE RISK MODELS

QFGB 8904 MATHEMATICS FOR QUANTITATIVE FINANCE (SAS, MATLAB)	3 Cr.
QFGB 8911 ADV FIN'L MODELING (EXCEL & VBA, CONTINUOUS TIME MODELS, TIME SERIES)	2 Cr.
QFGB 8912 APPLIED MICRO-ECONOMICS (ADVANCED MATH & ALGEBRA, MATLAB)	2 Cr.
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UNIVERSITY OF PITTSBURGH: DOCTOR OF PHILOSOPHY, 91 CREDITS (DOUBLE DOCTORATE)

* Completed 2x Credits required for 45-Credit PhD

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PSYED 2016 STATISTICAL METHODS 3: ANALYSIS OF VARIANCES	3 Cr.
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BORG 3099 READING ORGANIZATIONAL STUDIES: QUANTITATIVE STATISTICAL METHODS	3 Cr.
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Quantitative Risk Management: 45 Credits (PhD Doctoral Equivalent Courses in STATISTICS Applications)

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ADVANCED STATISTICS & QUANTITATIVE FINANCE MODELING COURSES IN OTHER GRADUATE DEGREES

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NCS599 POST DOCTORAL RESEARCH THESIS IN ADVANCED STATISTICS & QUANTITATIVE FINANCE 6 Cr.

SUNY POLYTECHNIC INSTITUTE: MS COMPUTER SCIENCE/ COMPUTATIONAL QUANTITATIVE FINANCE

CS 591 INDEPENDENT STUDY: FINANCIAL DERIVATIVES PRICING MODELS IN C++ 3 Cr.

CS 598 PROJECT: STATISTICAL MODELING USING SAS & ADVANCED SAS, SQL, MACROS 3 Cr.

SUNY POLYTECHNIC INSTITUTE: MS ACCOUNTANCY/FINANCE CONCENTRATION

FIN 532 INVESTMENT STRATEGY: FINANCIAL DERIVATIVES & OPTIONS PRICING, EFF. PORTFOLIO 3 Cr.

FIN 685 SEMINAR/ACCOUNTING & FINANCE: CAPITAL MARKETS & MULTIFACTOR MODELS, CAPM 3 Cr.

FIN 525 FINANCIAL MANAGEMENT PROBLEMS: PRESENT VALUE MODELS 3 Cr.

UNIVERSITY OF NEVADA LAS VEGAS: MBA QUANTITATIVE ECONOMICS & STATISTICS

ECO771 ADVANCED STATISTICAL MODELING: ECONOMETRICS 3 Cr.

MGT713 OPTIMIZATION TECHNIQUES 3 Cr.

FIN702 PROBLEMS IN BUSINESS FINANCE: PRESENT VALUE MODELS 3 Cr.

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