

CURRENT POSITION

NYU–Polytechnic Institute Dept. of Finance and Risk Engineering

Assistant Professor, 2008-now
Track Coordinator, 2010-now
Technology and Algorithmic Finance



EDUCATION

University of Chicago Booth School of Business

Ph.D. in Finance, 2007
Dissertation Title: [Self-Imposed Limits to Arbitrage](#).
Dissertation Committee Members:

- [Richard H. Thaler](#) (chair)
- [Nicholas C. Barberis](#)
- [Tobias J. Moskowitz](#)
- [Luboš Pástor](#).

Fulfilled coursework requirements in first year.
Achieved candidacy in second year.
[Graduated](#) and received [diploma](#) on December 7, 2007.



Harvard University Faculty of Arts and Sciences School of Engineering and Applied Sciences

M.S. in Applied Mathematics, 1997
Two degrees (M.S. and B.A.) in combined 3.5 years.



Harvard University Faculty of Arts and Sciences Harvard College

B.A. in Computer Science, 1997
Dean's List. Harvard Scholarships, 1993, 1997.



PUBLISHED AND ACCEPTED RESEARCH PAPERS

1. [Constructing The Best Trading Strategy: A New General Framework](#) (with Zakhar G. Maymin)

Journal of Investment Strategies 2011, 1:1, 1-22.

SSRN Top Ten download list for:

- ERN: Speculation in Economic Markets (Topic).
- Econometrics: Mathematical Methods & Programming eJournal.
- ERN: Optimization Techniques; Programming Models1; Dynamic Analysis (Topic).



2. [Markets are Efficient If and Only If P = NP](#)

Algorithmic Finance 2011, 1:1, 1-11.

Presented at:

- [TEDxNSIT](#), an independently organized TED event.
- Kent State University and NYU Stern IOMS-IS Research Seminar Series.

SSRN Top Ten download list for:

- Behavioral & Experimental Finance eJournal and FEN: Behavioral Finance (Topic).
- Capital Markets: Market Efficiency eJournal and Capital Markets eJournal.
- ISN Subject Matter eJournals and Information Systems & eBusiness Network.
- Information Systems & Economics eJournal and Information Systems: Behavioral & Social Methods eJournal.



3. [The Minimal Model of Financial Complexity](#)

Quantitative Finance 2011, 11:9, 1371-1378.

Presented at: Cornell Financial Engineering Manhattan.

SSRN Top Ten download list for:

- Financial Engineering, ERN: Behavioral Finance (Topic), and FEN Risk Journals.



4. [Self-Imposed Limits to Arbitrage](#)

Journal of Applied Finance 2011, 21:2, 88-105.

Presented at: 9th Annual Columbia-JAFEE Conference on Quantitative Finance.



5. [Music and the Market: Song and Stock Volatility](#)

The North American Journal of Economics and Finance 2012, 23:1, 70-85.

Presented at: 3rd annual meeting of the Academy of Behavioral Finance & Economics.

Featured in dozens of outlets including:

- [Boston Globe](#), [SmartMoney](#), [WNYC's The Takeaway](#), [Guardian \(UK\)](#), [BBC Radio Ulster](#), [Tages-Anzeiger](#), [NPR's All Things Considered](#), [NPR's Here and Now](#), [Newsweek Poland](#), [Financial Times Deutschland](#), [Studio 360](#), [CNBC](#), [MSNBC's Rachel Maddow](#), [Sirius/XM Radio](#), and [USA Today](#), among others.
- Wrote an article for the [New York Post](#) about this, and the links between popular culture and finance.



SSRN Top Ten download list for:

- Banking & Financial Institutions Journals, Capital Markets Journals, and Behavioral & Experimental Finance.
- Cognition and the Arts eJournal, CSN: Genre & Media (Topic), CSN: Music (Sub-Topic), and CSN: Subject Matter eJournals.

6. [Preventing Emotional Investing](#) (with Gregg S. Fisher)

Journal of Wealth Management, Spring 2011, 13:4, [34-43](#).

Presented at:

- [International Research Forum at the Hong Kong Polytechnic University](#).
- [International Conference on Applied Statistics and Financial Mathematics](#).

Featured in: [New York Times](#) and [CBS MarketWatch](#).

SSRN Top Ten download list for:

- CGN: Financial Advisors (Sub-Topic), CGN: Financial/Investment Practice (Topic), and CGN: Gatekeepers (Topic).
- Household Finance eJournal, Pension Risk Management eJournal, and Corporate Governance Practice Series eJournal.



7. [The Iron Fist vs. the Invisible Hand: Interventionism and libertarianism in environmental economic discourses](#) (with Tai Wei Lim)

World Review of Entrepreneurship, Management and Sustainable Development forthcoming.

SSRN Top Ten download list for:

- Environmental Economics eJournal and Environmental Justice & Sustainability eJournal.
- PSN: Environment (Topic) and ERN: Structure, Scope, & Performance of Government (Topic).
- ERN: Other Political Economy: National, State & Local Government; Intergovernmental Relations (Topic).
- Political Economy: Development eJournal and Political Economy: Structure & Scope of Government eJournal.



8. [Metanoia and the Market](#)

Advances in Behavioral Finance and Economics, Winter 2011, 1:1, [27-42](#).

Research featured in: [2nd annual meeting of the Academy of Behavioral Finance & Economics](#).

SSRN Top Ten download list for ESMT: Survey Methods (Topic).



9. [Past Performance is Indicative of Future Beliefs](#) (with Gregg S. Fisher)

Risk and Decision Analysis 2011 2:3, 145-150.

Research featured in: [Financial Times](#), [Forbes](#).

SSRN Top Ten download list for:

- ERN: Behavioral Finance (Topic) and FEN: Behavioral Finance (Topic).
- Behavioral & Experimental Finance (Editor's Choice) eJournal.
- Mutual Funds, Hedge Funds, & Investment Industry eJournal.
- ERN: Econometric Modeling in Financial Economics (Topic).
- Household Finance eJournal and Behavioral & Experimental Finance eJournal.
- Microeconomics: General Equilibrium & Disequilibrium Models of Financial Markets eJournal.



10. [The Hazards of Propping Up: Bubbles and Chaos](#)

International Journal of Business and Finance Research 2009 3:2, [83-93](#).

Featured in: [AOL's Daily Finance](#) interview about bubbles.

SSRN Top Ten download list for:

- IPE: International Finance & Investment (Topic) and Political Methods: Quantitative Methods eJournal.
- Political Methods Journals and ERN: Comparative or Joint Analysis of Fiscal & Monetary Policy; Stabilization (Topic).
- MMFP: Comparative or Joint Analysis of Fiscal & Monetary Policy; Stabilization (Topic).
- QM: Econometrics, Polimetrics, & Statistics (Topic) and PSN: Econometrics, Polimetrics, & Statistics (Topic).



11. [Regulation Simulation](#)

European Journal of Finance and Banking Research 2009 2:2, [1-12](#).

SSRN Top Ten download list for ERN: Regulation (European) (Topic).

Paper cited by [Journal of Economics and Business](#)



12. [Prospect Theory and Fat Tails](#)

Risk and Decision Analysis 2009 1:3, [187-195](#).

Featured in:

- [Forbes Magazine](#) invited article (with Gregg S. Fisher).
- Gerstein Fisher 2009 annual event, 500+ investors.



PUBLISHED ACADEMIC EDITORIALS

“Behavioral Finance Has Come of Age,” *Risk and Decision Analysis* 2011 2:3, [145-150](#).

“Why Financial Regulation is Doomed to Fail,” *Library of Economics and Liberty* [March 7, 2011](#).

TEXTBOOKS AND BOOK CHAPTERS

[Financial Hacking](#)

Evaluate risks, price derivatives, structure trades,
and build your intuition quickly and easily
World Scientific Publishing forthcoming.



[Programming Complex Systems](#)

In Yaneer Bar-Yam (Ed.), 2003, [Unifying Themes in Complex Systems, Vol. I](#),
Proceedings of the First International Conference on Complex Systems (1997),
Chapter 32, pp.325-341, Colorado: Westview Press.



EDITORIAL AND REFEREEING ACTIVITIES

Founding Managing Editor of [Algorithmic Finance](#).

Co-Editor for special issue of *Risk and Decision Analysis*.

Served as referee for papers submitted to:

- *Risk and Decision Analysis*
- *Journal of Economics and Business*
- *Applied Stochastic Models in Business and Industry*
- *Quantitative Finance*
- *Complex Systems*
- *Computational Economics*

Reviewed numerous book proposals for World Scientific.



WORKING PAPERS

1. [Any Regulation of Risk Increases Risk \(with Zakhar G. Maymin\)](#)

Presented at: Stanford University, NYU-Poly, Oliver Wyman, Society of Actuaries meeting.

Featured in: [Library of Economics & Liberty](#), [American Banker](#), [Fairfield Weekly](#), [LewRockwell](#).

SSRN Top Ten download list for:

- CGN: Risk Management, Including Hedging & Derivatives (Topic).
- Risk Management eJournal” and “Risk, Regulation, & Policy eJournal.
- ERN: Uncertainty & Risk Modeling (Topic)| and “ER: Regulation (IO) (Topic).
- Microeconomics: Decision-Making under Risk and Uncertainty eJournal.
- IO: Regulation, Antitrust & Privatization eJournal.
- Regulation of Financial Institutions eJournal” and “Banking & Financial Institutions eJournal.
- Corporate Governance: Disclosure, Internal Control, & Risk-Management eJournal.

2. [Momentum’s Hidden Sensitivity to the Starting Day \(with Zakhar G. Maymin and Gregg S. Fisher\)](#)

SSRN Top Ten download list for:

- Econometrics: Single Equation Models eJournal and Financial Engineering eJournal.
- ERN: Time-Series Models (Single) (Topic).

3. [Schizophrenic Representative Investors](#)

4. [The Five Factors of Optimal Free Throw Shooting \(with Allan Maymin and Eugene Shen\)](#)

5. [How Much Trouble is Early Foul Trouble? \(with Allan Maymin and Eugene Shen\)](#)

Presented at: MIT Sloan Sports Analytics Conference, Southern Economic Association.

Research featured in: [ESPN #1](#), [ESPN #2](#), [The Atlantic](#).

SSRN Top Ten download list for:

- Behavioral & Experimental Finance (Editor's Choice) eJournal.
- FEN: Behavioral Finance (Topic) and Behavioral & Experimental Finance eJournal.
- Economics Research Network and ERN Subject Matter eJournals.
- ERN: Other Microeconomics: Decision-Making under Risk & Uncertainty (Topic).
- Financial Economics Network and FEN Subject Matter eJournals.
- Microeconomic Theory eJournals and Microeconomics: Decision-Making under Risk & Uncertainty eJournal.

6. [NBA Chemistry: Positive and Negative Synergies in Basketball \(with Allan Maymin and Eugene Shen\)](#)

Research featured in: [ESPN](#). **Presented at:** MIT Sloan Sports Management Conference (scheduled).

SSRN Top Ten download list for:

- Decision Analysis eJournal and Decision Making, Organizational Behavior & Performance eJournal.
- ERN: Criteria for Decision-Making under Risk & Uncertainty (Topic).
- ERN: Sports Economics (Topic), ERN: Team Theory (Topic), and Microeconomic Theory eJournals.
- Labor: Human Capital eJournal and Labor: Personnel Economics eJournal.
- MRN Operations Research Network and MRN Organizational Behavior Research Network.
- OPER Subject Matter eJournal and OPER: Single Decision Maker (Topic).
- ORG Subject Matter eJournals and ORG: Groups & Teams (Topic).
- Econometrics: Applied Econometric Modeling in Microeconomics eJournal.
- Organizations & Markets: Personnel Management eJournal.

CONFERENCE AND RESEARCH PRESENTATIONS



[5th Annual CARISMA Conference: Behavioural and Quantitative Finance](#)

Organized by the Centre for the Analysis of Risk and Optimisation Modelling Applications, Brunel University, in collaboration with the Centre for Financial Research, Statistical Laboratory, University of Cambridge and the Nomura Centre for Mathematical Finance, Mathematical Institute, University of Oxford.



[9th Annual Columbia-JAFEE Conference on Quantitative Finance](#)

Organized by the Departments of Mathematics and Statistics at Columbia University and the Japanese Association of Financial Econometrics and Engineering.



[TEDxNSIT](#), an independently organized TED event in New Delhi, India.

TED (Technology, Entertainment, Design) is a U.S. private nonprofit foundation devoted to *Ideas Worth Spreading*.



[2nd Annual Meeting of the Academy of Behavioral Finance & Economics](#)

The mission of the ABFE is to offer a dedicated forum for exchange of research findings and professional advancement related to the fast-growing field of behavioral finance and economics.



[Stanford University Workshop on Capitalism's Crises](#)

An interdisciplinary workshop focusing on the ways scholars and experts are rethinking questions and assumptions about capitalism and crisis.



[International Research Forum at the Hong Kong Polytechnic University](#)

"What can the academic community learn from the global crisis?" This forum is aimed at identifying research orientations and education needs with revelatory insights from the global economic crisis.



[International Conference: Applied Statistics & Financial Mathematics](#)

This conference brings together leading international researchers interested in both the theoretical and practical aspects of applied statistics and financial mathematics.



[MIT Sloan Sports Analytics Conference](#) (2011 and 2012)

The goal of this conference is to provide a forum for sports industry professionals, executives and leading researchers to discuss the important and increasing role of analytics in the sports industry.



[Society of Actuaries 2011 Annual Meeting](#)

The mission of the SOA is to advance actuarial knowledge and to enhance the ability of actuaries to provide expert advice and relevant solutions for financial, business, and societal problems involving uncertain future events.



[81st Annual Southern Economic Association Meeting](#)

One of the oldest regional economics associations, it seeks to stimulate interest in and disseminate results of recent research in theory and applied economics.

Research seminar presentations: NYU Stern IOMS-IS and Kent State University.

Other presentations: Oliver Wyman, Gerstein Fisher, and NYU-Poly Alumni Day.

TEACHING EXPERIENCE

NYU–Polytechnic Institute

2008-now

- Financial Risk Management & Asset Pricing.
- Financial Hacking (new course on exotic derivatives).
- Behavioral Finance.
- Topics in Hedge Funds and Trading.



Harvard University

1996

Head Teaching Fellow: *Principles of Programming Languages*

- First undergraduate to be head teaching fellow for this course.
- Taught weekly classes. Graded. Languages included Prolog, ML and Scheme.



Phillips Academy

1993

Instructor: *Advanced Computer Science*

- First Phillips Academy student to teach while student.
- Taught most advanced computer science class for half of the semester.



SERVICE AT NYU-POLY

1. Track Coordinator of the Technology and Algorithmic Finance track.
 - Developed [new financial engineering track](#) bridging computer science and finance.
 - First and only algorithmic finance program in the world.
2. Member of various committees:
 - Academic spaces subcommittee.
 - Faculty search committee and faculty promotion committee.
3. Student advising:
 - Member of dissertation committee for Mirela Ivan, Ph.D., Mathematics, 2010.
 - Dissertation chair for Jason Yarmish, current Ph.D. candidate, Mathematics.
 - Supervised many capstone research projects and independent research projects.
 - Judge for student essay competition.
 - Advisor for student trading competition.
 - Advisor for multiple student teams in inaugural IAFE student competition.
4. Organizer of various research activities:
 - Departmental [lecture series](#). Faculty research roundtable.
 - Departmental [working paper series](#) and its inclusion on SSRN.
5. Miscellaneous:
 - Wrote for and helped edit the department's [newsletter](#).
 - Interviewed Provost and President, edited video, etc., for new departmental website.

PORTFOLIO MANAGEMENT EXPERIENCE

Maymin Capital Management LLC

Maymin Capital Management LLC

2005-2007

Co-Founder and Portfolio Manager

- Launched behavioral relative value hedge fund.
- Managed \$50 million on average trading equity derivatives and statistical arbitrage strategies in the US, Europe, and Asia.



Ellington
Management
Group LLC



Ellington Management Group LLC

2000-2004

Portfolio Manager

- Launched and ran entire equity derivatives and statistical arbitrage desks.
- Managed both the portfolio and the business, including building all business relationships and negotiating all contracts and documents.
- Developed all models and programmed and maintained all databases and programs.
- Strategies included: convertible bond arbitrage, volatility arbitrage, statistical arbitrage and special situations.

LONG-TERM CAPITAL MANAGEMENT

Long-Term Capital Management LP

1996-1999

Strategist

- Developed and traded relative-value strategies in equities and equity derivatives in:
 - America, Europe, Japan
 - Hong Kong, Korea, Thailand, and Taiwan
 - Philippines, Singapore, Australia, New Zealand, and India
- Strategies included closed-end fund arbitrage, local vs. foreign premiums, warrant arbitrage, convertible bond arbitrage, high-yield bond strategies, mean-reversion and volatility arbitrage both in single-stocks and indices.

OTHER ACTIVITIES AND SKILLS

Law and Politics

- Attorney at law [admitted to practice in California](#) (2010). [Bar #272798](#).
- Juris Doctor (J.D.), 2010, Northwestern California University School of Law.
- Member of the State Bar of California and the American Bar Association.
- Consulted as expert witness on financial valuation, hedge funds, and fund-of-funds.
- [Justice of the Peace](#) in Greenwich, CT, 2005-2011.
- [Libertarian Party Candidate for U.S. House of Representatives from CT's 4th district](#).
- Hundreds of print articles, dozens of radio shows, and several appearances on national television on MSNBC News Live, MSNBC's *Tucker*, and C-SPAN. [Videos available](#).
- Subject of national documentary "[Running for a Change](#)" by the Washington Post.



Policy Research and Journalism

- Wrote 135 [columns](#) of commentary and analysis on politics, economics, culture, and current events, published primarily in the *Fairfield County Weekly*, often also carried by the *Hartford Advocate*, the *New Haven Advocate*, and [LewRockwell.com](#).
- Winner of [2007 Excellence in Journalism Award – Radio Investigative](#) by the Connecticut chapter of the Society of Professional Journalists.
- [2010 Finalist for the Bastiat Prize in Online Journalism](#) of International Policy Network.
- Wrote policy editorials for the *Connecticut Post*, *Waterbury Republican-American*, *Hartford Business Journal*, *Journal Inquirer*, and *Greenwich Post*, among others, as a Policy Scholar for the Yankee Institute for Public Policy.
- Author of [Yankee Wake Up](#), [Free Your Inner Yankee](#), and [Yankee Go Home](#).



Basketball and Sports Management

- Editor, Basketball News Services, 2004-2005. Wrote [600 articles](#) for hoopsworld.com.
- Director of Marketing and Promotions for *Swish Magazine*, 2004-2005.
- Received [Basketball General Manager and Scouting Certificate](#) in 2007 from Sports Management Worldwide. Reference: Dr. Lynn Lashbrook, President.
- Author of the book [NBA Mysticism: Prophecies Fulfilled and Fortunes Told](#).
- Presented at [2011 MIT Sloan Sports Analytics Conference](#).



Hobbies

- Writing: Chosen by Orson Scott Card to participate in 2002 writing workshop.
- Acting: Training in Meisner method. Played [small role in an independent film](#).
- Chess: 1992 Massachusetts Class Championships, first place in my section.
2008 Continental Open, third place in my section.
- AI: One of four Finalists in the 1995 Loebner prize in Artificial Intelligence.
- Languages: Native/fluent in English and Russian, beginning Japanese and French.
- Computer languages: Mathematica, S-PLUS and R, C and C++, SQL, Visual Basic, Perl, Python, PHP, HTML/CSS, Javascript, LaTeX, LISP, Scheme, Pascal, Prolog, ML.