Updated: July 2021

BAOZHONG YANG

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Education

Ph.D., Finance, Stanford Graduate School of Business, 2008

Ph.D., Mathematics, Massachusetts Institute of Technology, 2000

B.S., Mathematics, Peking University (Beijing, China), 1996

Employment and Positions

- H. Talmage Dobbs Jr Chair in Finance, Associate Professor of Finance (with Tenure), Assistant Professor of Finance, Georgia State University, 2008 present
- Director of FinTech Lab, Georgia State University, 2018 present
- Visiting Scholar, Federal Reserve Bank of Atlanta, Spring 2015
- George Polya Postdoctoral Fellow, Department of Mathematics, Stanford University, 2000 2003

Research Interests

FinTech: machine learning, artificial intelligence, big data, textual analysis, blockchain, FinTech innovation

Corporate Finance: dynamic models, capital structure, contracting, governance, regulation

Investments and Asset Pricing: hedge funds, mutual funds, asset prices

Honors and Awards

• CAPANA Conference Best Paper Award, 2021, "How to Talk When a Machine is Listening: Corporate Disclosure in the Age of AI"

- Emerald Citations of Excellence, 2016, awarded to "*The Mystery of Zero-Leverage Firms*" for being one of the most cited papers in finance, accounting, marketing and business published in 2013
- Yihong Xia Best Paper Prize, China International Conference in Finance, 2015, awarded to "Communication and Comovement: Evidence from Online Stock Forums"
- Chicago Quantitative Alliance Annual Academic Competition, 3rd Prize, 2010, awarded to *"Uncovering Hedge Fund Skill from the Portfolio Holdings They Hide"*
- Sigma Xi, 2002
- Gold Medal in the 33rd *International Mathematical Olympiad* (IMO) with full score (42/42), Moscow, Russia, 1992

Publications in Refereed Journals

- 1. Copycat Skills and Disclosure Costs: Evidence from Peer Companies' Digital Footprints (with Sean Cao, Kai Du, and Liang Zhang), *forthcoming, Journal of Accounting Research*
- 2. Dynamic Prudential Regulation (with Ajay Subramanian), 2020, *Management Science* 66 (7), 3183-3210.
 - NBER Law and Economics Summer Institute, and Finance Theory Group Conference at Duke University
- 3. Blockchain Architecture for Auditing Automation and Trust Building in Public Markets, (with Sean Cao, Lin William Cong, Meng Han, and Qixuan Hou), 2020, *IEEE Computer* 53 (7), 20-28.
 - IEEE Computer Special Issue on Blockchains
- 4. How Valuable is FinTech Innovation (with Mark Chen and Qinxi Wu), 2019, *Review of Financial Studies* 32, 2062-2106
 - Review of Financial Studies Special Issue on FinTech
- 5. Communication and Comovement: Evidence from Online Stock Forums (with Lei Jiang and Jinyu Liu), 2019, *Financial Management* 48, 805-847
 - Yihong Xia Best Paper Prize, 2015 CICF
- 6. Optimal Dynamic Risk Taking (with Ajay Subramanian), 2017, *Mathematics of Operations Research* 42, 599-625
- Mandatory Portfolio Disclosure, Stock Liquidity, and Mutual Fund Performance (with Vikas Agarwal, Kevin Mullally and Yuehua Tang), 2015, *Journal of Finance* 70, 2733-2776
- 8. The Mystery of Zero-Leverage Firms (with Ilya A. Strebulaev), 2013, *Journal of Financial Economics* 109, 1-23 (Lead Article)
 - Emerald Citations of Excellence, 2016

- 9. Uncovering Hedge Fund Skill from the Portfolio Holdings They Hide (with Vikas Agarwal, Wei Jiang, and Yuehua Tang), 2013, *Journal of Finance* 68, 739-783
 - NBER Law and Economics and AFA Meetings
 - Chicago Quantitative Alliance Annual Academic Competition, 3rd Prize, 2010
- 10. Dynamic Capital Structure under Heterogeneous Beliefs with Market Timing, 2013, Journal of Corporate Finance 22, 254-277
- 11. Communication, Excess Comovement and Factor Structures, 2013, *Journal of Business Finance and Accounting* 40, 1304-1325

Book Chapter and Other Publications

- 12. Analyzing Textual Information at Scale, with Lin William Cong, Tengyuan Liang, and Xiao Zhang, 2020, Book Chapter in *Information to Facilitate Efficient Decision Making: Big Data, Blockchain and Relevance*, edited by Kashi Balachandran, World Scientific Publishers.
- 13. Family Firms and Boards of Directors (with Huimin Li, Harley Ryan, and Lingling Wang), *Indian School of Business Insight Magazine* October 2013, 16-20.

Publications in Mathematics

- 14. Compactification of the moduli spaces of vortices and coupled vortices (with Gang Tian), 553, 2002, *Journal für die reine und angewandte Mathematik*, 17-41.
- 15. Removable singularities of Yang-Mills connections in higher dimensions, 209, 2003, *Pacific Journal of Mathematics*, 381-398.
- 16. The uniqueness of tangent cones for Yang-Mills connections with isolated singularities, 180, 2003, *Advances in Mathematics*, 648-691.

Working Papers

- 17. From Man vs. Machine to Man + Machine: The Art and AI of Stock Analyses, May 2021, with Sean Cao, Wei Jiang, and Junbo L. Wang Presented: NBER Economics of AI Conference, Econometric Society China Meeting, AI and Big Data in Finance Research Forum, AllianceBernstein, CKGSB, NFA Media Coverage: Harvard Law School Forum on Corporate Governance
- 18. How to Talk When a Machine is Listening: Corporate Disclosure in the Age of AI, with Sean Cao, Wei Jiang, and Alan L. Zhang, *Invited for Submission, Review of Financial Studies Presented: NBER Economics of AI Conference, NBER Big Data and Securities Markets Conference, American Finance Association, the Third Bergen FinTech Conference, SOAR*

Webinar at Stockholm Business School, EDHEC Business School, Maryland, Michigan State University, Peking University, Toronto, Utah

- 19. Financial Reporting and Blockchains: Audit Pricing, Misstatements, and Regulation (with Sean Cao and Lin William Cong), *Invited for Resubmission, Management Science Presented: Ant Financial Workshop, DataYes & ACM KDD China FinTech and AI Workshop, Federal Reserve Bank of Atlanta Conference on New Technologies and Financial Stability, PCAOB/JAR Conference on Auditing and Capital Markets, Georgia State University Workshops at the Departments of Accountancy, Computer Science, and Finance*
- 20. Product Variety and Asset Pricing (with Florin Bidian and Ajay Subramanian) Presented: Econometric Society North America Winter Meeting, Econometric Society China Meeting, Econometric Society Australasian Meeting, Econometric Society Asian Meeting
- 21. A Model of Hedge Fund Fees with Renegotiation (with Vikas Agarwal and Sugata Ray) *Presented: American Finance Association Meetings*
- 22. Family Firms and Boards of Directors: Evidence from Board Tenure (with Huimin Li, Harley Ryan, and Lingling Wang) *Presented: Indian School of Business Summer Conference, FMA*
- 23. Do Mutual Funds Have Market Timing Ability? Evidence from Their Daily Trades (with Vikas Agarwal, Kevin Mullally, and Yuehua Tang)

Research Impact (as of July 2020)

- SSRN Downloads: 12,363 (http://ssrn.com/author=596876)
- Google Scholar Citations: **1,323** (<u>https://scholar.google.com/citations?user=sBfsoEoAAAAJ</u>)
- Web of Science Citations: **333** (<u>https://publons.com/researcher/2352751/baozhong-yang/</u>)

Grants

- Research Initiation Grant, \$10,000, Georgia State University, 2011
- Research Grant from the Institute for Quantitative Research in Finance (Q-group), 2009, "Do Institutional Investors Have An Ace Up Their Sleeves? Evidence from Confidential Filings of Portfolio Holdings" (with Vikas Agarwal, Wei Jiang, and Yuehua Tang), \$10,000
- NSF Research Grant for research in mathematics DMS-0104163, 2001-2003

Teaching Experiences

- Instructor, Robinson College of Business, Georgia State University
 - Graduate Courses
 - Introduction to FinTech (FI 8460), Spring 2018 Fall 2020 Average Teaching Evaluation: 4.8/5.0
 - Blockchain and Business Disruption (FI 8462), Fall 2018 present Average Teaching Evaluation: 4.6/5.0
 - *FinTech Experience* (FI 8388), Fall 2018 present Average Teaching Evaluation: 5.0/5.0
 - *PhD Seminar in Computer Information Systems*, Guest Lecture on FinTech Research, Georgia State University, Spring 2021
 - *MBA Foundations of Corporate Finance* (MBA 8135), 2017 Average Teaching Evaluation: 4.5/5.0
 - Executive MBA FinTech Module, Spring 2019 present
 - FinTech Sprint Project with TSYS, Spring 2019
 - o Master of Analytics Blockchain Bootcamp, Fall 2019 present
 - o Truist Bank FinTech Bootcamp, Summer 2021
 - Undergraduate courses
 - *Financial Markets and Institutions* (FI 4420), 2008 2020
 Average Teaching Evaluation: 4.8/5.0 (most recent three years)
 - Corporate Finance (FI 3300), 2013 present Average Teaching Evaluation: 4.7/5.0
 - Business Freshman Orientation (GSU1010), 2016 2017 Average Teaching Evaluation: 4.5/5.0
 - Blockchain and Business Disruption (FI 4462), Spring 2021 present Average Teaching Evaluation: 4.6/5.0
- Instructor, Department of Mathematics, Stanford University, 2000-2003
 - Undergraduate Courses: Linear Algebra, Differential Equations, Functional Analysis
 - o Graduate Courses: Analysis on Manifolds, Topics in Differential Geometry

Invited Seminars and Conference Presentations (including scheduled talks, conference presentations by coauthors are indicated by *, conferences cancelled due to Covid-19 are indicated by [†])

2006	Western	Finance	Association	Annual	Meetings	at Keystone,	CO
2000	western	гпансе	Association	Annual	Meetings	at Keystone,	CO

- 2008 University of Minnesota, University of Maryland, University of California at Los Angeles, University of Houston, University of Wisconsin-Madison, University of Toronto, Georgia State University
- 2009 All Georgia Conference at Federal Reserve at Atlanta, Annual Conference on Financial Economics and Accounting at Rutgers University, Georgia State University

- 2010 NBER Law and Economics Meetings*, Georgia State University, National University of Singapore's Fourth International Conference on Finance*, FMA Meetings*, Oxford-Man Institute Hedge Fund Conference*, Conference on Empirical Legal Studies (CELS) at Yale Law School*
 2011 Conference on Financial Regulation at Univ. of Notre Dame, Hedge Fund Conference at Vanderbilt University*
- 2012 NBER Law and Economics Meetings, AFA Annual Meetings at Chicago*, Georgia State University, Conference on Capital Requirements at Federal Reserve at Cleveland, Georgia Tech, Fordham Conference on Liquidity and Risk Management, China International Conference in Finance (x2), Finance Theory Group Conference at Duke University*, FMA Meetings*, Conference on Financial Stability, Bank Risk and Regulation at Central Bank of Luxembourg*
- 2013 Texas Quantitative Finance Festival at University of Texas at Austin, the Sixth Conference on Professional Asset Management at Erasmus University*, Econometric Society China Meeting*, Econometric Society Australasian Meeting*, Indian School of Business Summer Research Conference in Finance*, Econometric Society Asian Meeting*, FMA (x2), CREDIT conference in Venice*, Biennial ICI Conference on Investment at the University of Maryland*, Conference on Empirical Legal Studies at University of Pennsylvania*
- 2014 Econometric Society North America Winter Meeting at Philadelphia*, International Conference on Quantitative Finance and Actuarial Science in Colombia*, ERMA 2014 in Romania*, China Finance and Economics Conference*, Georgia State University, Chinese Finance PhD Symposium at Xiamen*
- 2015 Federal Reserve Bank at Atlanta, Tsinghua University, Peking University, China International Conference in Finance*
- 2016 Second Annual Volatility Institute at NYU Shanghai*, FMA Meetings*
- 2017 Virginia Tech, Florida State University, Review of Financial Studies FinTech Workshop at Columbia University*, Western Economic Association Meetings*
- 2018 PCAOB/Journal of Accounting Research Conference at Washington DC, Financial Stability and Emerging Technologies Conference at Fed Atlanta, Georgia State University Computer Science Colloquium, Louisiana State University
- 2019 SFS Cavalcade North America, Eastern Finance Association Meetings, University of Kentucky PNC Conference*, China International Conference in Finance*, Financial Management Association Meetings*, Conference on Emerging Technologies in Accounting and Financial Economics (CETAFE) at Cornell University[†], GMARS Research Symposium at Michigan State University*, Georgia Tech SESARC Conference*, Midwest Finance Association Meetings*
- 2020 NBER Economics of AI Conference*, NBER Big Data and Securities Conference*, IIF Research Conference Keynote Speech, University of Georgia, Future of Financial Information Webinar at Swedish Business School*, Third Bergen FinTech

Conference*, SOAR Symposium at Singapore Management University*, SEC Capital Markets and Regulation Conference[†]

2021 NBER Economics of AI Conference*, Adam Smith Workshop, Economic Society China Meetings, Financial Intermediation Research Society Meetings, China FinTech Research Conference, Alliance Bernstein, SIAM Conference on Financial Mathematics, Quantitative Work Alliance for Applied Finance Boston Workshop, University of Miami Winter Machine Learning Conference in Business, China International Conference in Finance (x2)*, Northern Finance Association Meetings (x2)*

Professional Services

- Editorial Service
 - o Management Science, Guest Associate Editor, 2021
- Conference Organizer
 - o GSU Annual CEAR-Finance Conference, April 2016
 - o Inaugural GSU-RFS FinTech Conference, February 2019
 - o 2nd GSU-RFS FinTech Conference, February 2020
 - o 3rd GSU-RFS FinTech Conference, February 2022
- Program Committee
 - o Conference on Financial Economics and Accounting, 2014
 - o Eastern Financial Association Meetings 2017
 - SIF Conference on FinTech and Chinese Markets, 2018
 - o SFS Cavalcade Asia, 2018
 - GSU-RFS FinTech Conference, 2019
 - Conference on Emerging Technologies in Accounting and Financial Economics at University of Southern California, 2019
 - SFS Cavalcade Asia, 2019
 - Midwest Finance Association Meetings, 2019
 - GSU-RFS FinTech Conference, 2020
 - ACM International Conference on AI in Finance, 2020
 - Crypto and Blockchain Economics Research (CBER) Management Science Conference, 2021
 - Western Finance Association Meetings, 2021
 - o China International Conference in Finance, 2021
- Session Chair
 - o GSU Annual CEAR-Finance Conference/Symposium, 2013 present
 - Financial System of the Future Conference, Fed Atlanta, November 2019
 - China International Conference in Finance, 2021
 - o China International Risk Forum, 2021
- Discussant
 - FIRS Meetings, June 2012
 - China International Conference in Finance (x2), July 2012
 - o FMA Meetings, October 2012
 - CFEA Meetings, October 2014
 - NBER Law and Economics Program Meeting, February 2015

- o SFS Cavalcade North America at Yale University, May 2018
- Sumer Institute in Finance Conference on FinTech and Chinese Markets, July 2018
- CICF Meetings, July 2019
- o Financial System of the Future Conference (x2), Fed Atlanta, November 2019
- o China Finance Research Conference, July 2021
- o Summer Institute in Finance Conference, July 2021
- Journal of Economic and Dynamic Control Special Issue on Data and Information Conference, August 2021
- Referee for Journals

Journal of Finance, Journal of Financial Economics, Review of Financial Studies, American Economic Review, Journal of Financial and Quantitative Analysis, Management Science, Review of Finance, B.E. Journal of Theoretical Economics, Economics Letters, Empirical Economics, European Economic Review, European Financial Management, Financial Review, International Economic Review, Journal of Banking and Finance, Journal of Business Finance and Accounting, Journal of Corporate Finance, Journal of Economic Dynamics and Control, Journal of Economics and Management Strategies, Journal of Empirical Finance, Quantitative Finance, Review of Financial Economics

- Grant Reviewer
 - o GACR (Czech Science Foundation), 2013
 - o Hong Kong Research Grant Council, 2017, 2019, 2020, 2021
- Book Reviewer
 - o MIT Press, 2019
 - o University of Toronto, 2021
- GSU Finance Seminar Series Organizer, 2014-2015
- Member and Chair of various Recruiting, P&T, and Cumulative Review Committees at GSU, 2008-present

Doctoral Students

- Jinjing Wang (Dissertation committee), Ph.D., 2015
- Hongjun Ha (Dissertation committee), Ph.D. 2016
- Denise McCurdy (Dissertation committee), Executive DBA, 2020
- Babu Manikandan (Dissertation Committee), Executive DBA, 2020
- Kevin Chalk (Dissertation Committee), Executive DBA, 2021
- Alan (Liang) Zhang (Dissertation Committee), Ph.D., 2021 (expected)
- Huan Kuang (External Committee Member), Ph.D. 2022 (expected)
- Norman (Xuxi) Guo (Chair), Ph.D. 2022 (expected)
- Meng Wang (Co-Chair), Ph.D. (on-going)

Selected Media Coverage

- Forbes, March 29, 2010, "Follow that billionaire" by William Baldwin
- *The Wall Street Journal,* December 8, 2011, "Mum's the Word for Some Investors" by Scott Thurm and Jean Eaglesham
- *CFO.com*, April 12, 2012, "Why Not Zero Leverage", by Vincent Ryan
- Duke FinTech Blog, 2018, "How Valuable is FinTech Innovation"
- *Duke FinTech Blog*, 2018, "Auditing and Blockchains: Pricing, Misstatements, and Regulation"
- *Chicago Booth Review*, 2018, "Auditing and Blockchains: Pricing, Misstatements, and Regulation"
- *Columbia Law School Blue Sky Blog*, October 1, 2020, "How to Talk When a Machine is Listening: Corporate Disclosure in the Age of AI"
- *Bloomberg*, October 20, 2020, "Sweet-Talking CEOs are Starting to Outsmart the Robot Analysts," by Gregor Stuart Hunter
- *CNBC*, October 20, 2020, "Corporate Execs are Talking Differently on Earnings Calls to Please the Machines," by Bob Pisani
- *Oxford Business Law Blog*, October 21, 2020, "How to Talk When a Machine is Listening: Corporate Disclosure in the Age of AI"
- *ZeroHedge*, October 21, 2020, "Companies are Changing the Language in Their Quarterly Reports to Appeal to Algos," by Tyler Durden
- *Financial Times*, December 5, 2020, "Robo-Surveillance Shifts Tone of CEO Earnings Calls," by Robin Wigglesworth
- *Guardian*, December 5, 2020, "Companies are Now Writing Reports Tailored for AI Readers and It Should Worry Us" by John Naughton
- *NBER Digest*, December 2020, Lead Article, "How to Talk When a Machine is Listening: Corporate Disclosure in the Age of AI"

Skills

• Proficient: Python, C++, SAS, Stata, Matlab, Perl, Solidity