XIN "SHANE" GAO

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Academic Appointments

Assistant Professor of Finance, Worcester Polytechnic Institute (WPI), 2023-present

Assistant Professor of Finance, Sacred Heart University, 2016-2023

Education

Ph.D. in Finance, University of Houston

M.Sc. in Quantitative Finance, Rutgers University

M.Sc. in Computer Science, Bristol University, UK

B.Sc. in Computer Science, University of Science & Technology Beijing, China

Research Interests

Empirical asset pricing, institutional investors, asset allocation, commodities, corporate bonds, FinTech, financial econometrics.

Publication

"Climate Risk Pricing: Evidence from Commodity Options," with Rui Liu, Bingxin Li, and Kaitao Lin, 2026, ***Finance Research Letters***, Volume 114, Part B, 111064.

"Risk Premiums in the U.S. Treasury Futures," with Rui Liu, Guanglian Hu, and Bingxin Li, 2026, ***Journal of Banking & Finance***, 107669.

"Advancing Climate Technology in Developing Nations Through Energy Transition Investments," with Kwamie Dunbar, 2025, ***Energy Economics***, 152, 109027.

"Mining the Short Side: Institutional Investors and Stock Market Anomalies," with Ying Wang, 2023, ***Journal of Financial and Quantitative Analysis*** 58(1), 392-418.

"The Relative Pricing of WTI and Brent Crude Oil Futures: Expectations or Risk Premia?" with Bingxin Li and Rui Liu, 2023, ***Journal of Commodity Markets*** 30, 100274.

"Tick Size, Institutional Trading, and Market Making: A Study of the SEC Tick Size Pilot Program", with Kaitao Lin and Rui Liu, 2023 ***Quarterly Journal of Finance*** Vol. 12, No. 3.

"Forecasting variance swap payoffs," with Jonathan Dark, Thijs van der Heijden, and Federico Nardari, 2022, ***Journal of Futures Markets*** 42(12), 2135-2164.

"Do Commodities Add Economic Value in Asset Allocation? New Evidence from Time-Varying Moments," with Federico Nardari, 2018, ***Journal of Financial and Quantitative Analysis*** 53.1: 365-393.

Working Papers

"Fire Sales by Corporate Bond ETFs During the COVID-19 Crisis," with Jing-Zhi Huang, Nan Qin, and Ying Wang. (Revise and Resubmit)

"From Financial Alignment to Structural Change: Policy Effectiveness of Energy Transition Investment," with Kwamie Dunbar, and Mohammad Ismail

"Innovation Policy Responses to AI Adoption and Heterogeneous Labor Market Adjustment," with Kwamie Dunbar, and Walter Hargrove

"Impact of Climate Action Commitments on Climate Change Mitigation Technologies," with Kwamie Dunbar and Daniel Treku

“The Informational Role of Stock Prices in Corporate Bond Mutual Funds' Trading,” with Ying Wang

“Dynamic Portfolio Optimization Using Variance Swaps,” with Jonathan Dark, Federico Nardari, and Thijs van der Heijden

“Investing in Mutual Funds: Exploiting the Cross-sectional Predictability in Fund Performance,” with Federico Nardari

Work-in-Progress

“Around the Clock, Across the Atlantic: U.S. 23x5 Trading and European Cross-Listed Stocks,” with Xin Gao, Bingxin Li, and Kaitao Lin

“Illiquidity Contagion,” with Kaitao Lin and Rui Liu

“Effects of Errors in Higher Moments on Optimal Portfolio Selection”

“Asymmetric Liquidity Shocks in Corporate Bonds,” with Yufeng Han and Ying Wang

Teaching Interests

Investments, Portfolio Management, Derivatives, Data Analytics for Finance, FinTech, and Quantitative Methods in Finance.

Teaching Experience

Jack Welch College of Business, Sacred Heart University, 2016 - 2023

- Financial Management *(Undergraduate)*
- Investments *(Undergraduate)*
- Introduction to Python Programming for Data Analysis *(Undergraduate & Graduate)*
- Practical Python for Finance *(Undergraduate)*

C.T. Bauer College of Business, University of Houston, 2011 - 2016

- Derivatives I: Options
- Financial Securities and Innovation
- Corporate Finance

Services

Sacred Heart University, 2016 - 2023

- Recruiting Committee
- Research Committee

- Faculty Affairs Committee
- Dissertation Committee, Doctor of Business Administration (DBA) in Finance

Conference & Seminar Presentations

Conference Discussion, 2025 Southern Finance Association (SFA) Annual Conference, Orlando, FL, November, 2025. “Greenness Demand”

Conference Presentation*, Sydney Banking and Financial Stability Conference, Sydney, Australia, December, 2024. “Risk Premiums in the U.S. Treasury Futures”

Conference Presentation*, 64th Annual Southern Finance Association Meeting, West Palm Beach, FL, November, 2024. “Risk Premiums in the U.S. Treasury Futures”

Conference Presentation*, Adam Smith Sustainability Conference & 2nd Annual Conference of the British Accounting Review, Edinburgh, Scotland, August, 2024. “Climate Risk Premium: Evidence from Commodity Options”

Conference Presentation*, 2024 Financial Management Association Asia/Pacific Conference, Seoul, South Korea, July, 2024. “Risk Premiums in the U.S. Treasury Futures”

Conference Presentation, Commodity and Energy Markets Association (CEMA) Annual Conference 2024, Boston, MA, June, 2024. “Climate Risk Premium: Evidence from Commodity Options”

Conference Presentation, The 2024 China International Risk Forum & China Finance Review International Joint Conference, Nanjing, China, June, 2024. “Risk Premiums in the U.S. Treasury Futures”

Invited Talk, Seminars in Financial Mathmatics, Department of Mathmatics, Worcester Polytechnic Institute (WPI), October 2023. "Investing in Mutual Funds: Exploiting the Cross-sectional Predictability in Fund Performance"

Invited Talk, Department of Economics & Finance, Worcester Polytechnic Institute (WPI), December 2022. "Investing in Mutual Funds: Exploiting the Cross-sectional Predictability in Fund Performance"

Invited Talk, The Business School, Sacred Heart University, March 2016. "Investing in Mutual Funds: Exploiting the Cross-sectional Predictability in Fund Performance"

Conference Presentation, Southern Finance Association (SFA) Annual Meeting, November 2022. "The Informational Role of Stock Prices in Corporate Bond Mutual Funds' Trading"

Conference Presentation, Financial Management Association (FMA) International Annual Meeting, October 2022. "The Informational Role of Stock Prices in Corporate Bond Mutual Funds' Trading"

Conference Presentation*, Commodity and Energy Markets Association (CEMA) Annual Conference, October 2021. "The Relative Pricing of WTI and Brent Crude Oil Futures: Expectations or Risk Premia?"

Conference Presentation*, 29th Annual Conference on Pacific Basin Finance, Economics, Accounting, and Management (PBFEAM), September 2021. "The Relative Pricing of WTI and Brent Crude Oil Futures: Expectations or Risk Premia?"

Conference Presentation, Southern Finance Association (SFA) Annual Meeting, November 2019. "Investing in Mutual Funds: Exploiting the Cross-sectional Predictability in Fund Performance"

Conference Presentation, Eastern Finance Association (EFA) Annual Meeting, April 2019. "Investing in Mutual Funds: Exploiting the Cross-sectional Predictability in Fund Performance"

Conference Presentation, Midwest Finance Association (MFA) Annual Meeting, March 2019. "Do Institutional Investors Exploit Market Anomalies? New Evidence from Alternative Mutual Funds"

Conference Presentation, China International Conference in Finance (CICF), Beijing, China, July 2019. "Do Institutional Investors Exploit Market Anomalies? New Evidence from Alternative Mutual Funds"

Conference Presentation, 31st Australasian Finance & Banking Conference (AFBC), Sydney, Australia, December 2018. "Do Institutional Investors Exploit Market Anomalies? New Evidence from Alternative Mutual Funds"

Conference Presentation, Financial Management Association (FMA) International Annual Meeting, October 2018. "Investing in Mutual Funds: Exploiting the Cross-sectional Predictability in Fund Performance"

Conference Presentation, Financial Management Association (FMA) International Annual Meeting, October 2016. "Investing in Mutual Funds: Exploiting the Cross-sectional Predictability in Fund Performance"

Conference Presentation, Eastern Finance Association (EFA) Annual Meeting, April 2016. "Investing in Mutual Funds: Exploiting the Cross-sectional Predictability in Fund Performance"

Conference Presentation, Midwest Finance Association (MFA) Annual Meeting, March 2016. "Investing in Mutual Funds: Exploiting the Cross-sectional Predictability in Fund Performance"

Invited Talk, Department of Economics & Finance, Sacred Heart University, March 2016. "Investing in Mutual Funds: Exploiting the Cross-sectional Predictability in Fund Performance"

Invited Talk, Division of Finance, Stevens Institute of Technology, Feburary 2016. "Investing in Mutual Funds: Exploiting the Cross-sectional Predictability in Fund Performance"

Invited Talk, QMS Capital Management LP, December 2015. "Investing in Mutual Funds: Exploiting the Cross-sectional Predictability in Fund Performance"

Invited Talk, Department of Accounting & Finance, UMass Boston, November 2015. "Investing in Mutual Funds: Exploiting the Cross-sectional Predictability in Fund Performance"

Invited Talk, Perella Department of Finance, Lehigh University, November 2015. "Investing in Mutual F Exploiting the Cross-sectional Predictability in Fund Performance"

* *Paper presented by coauthors*

Ad Hoc Referee *Financial Analyst Journal, Energy Economics, Journal of Commodity Markets, Journal of Finance and Data Science, Emerging Markets Finance and Trade, Journal of Risk and Financial Management, International Review of Financial Analysis, Heliyon, and International Review of Economics and Finance.*

Honors & Awards

Summer Research Grant, Jack Welch College of Business, Sacred Heart University, 2021

Academics for Creative Teaching Grant, Sacred Heart University, 2021

Bauer "A Hit" Research Team Award, University of Houston 2016

Dean's Award for Academic Excellence, University of Houston 2016

Nominated for *Best Bauer Dissertation Proposal Award*, University of Houston 2015

Doctoral Student Fellowship, University of Houston 2010~2015

Presidential Graduate Fellowship, University of Houston 2010~2012

Professional Experience

Data Analyst, Summer 2008
Thales Avionics Inc., Edison, NJ

Software Engineer/Project Manager, 2005-2007
Gameloft Software Beijing Ltd., Beijing, China

Computer Skills

Programming: SAS, MatLab, Python, R, VBA, C, C++, JAVA.
Databases: CRSP, Compustat, Morningstar, Datastream, Bloomberg.