JIMMIE H. LENZ

314-919-6114

JimmieHLenz@gmail.com

Dr. Jimmie Lenz is an accomplished executive and academic, with a lifetime of experience in applied learning. His successes have propelled him into a number of senior management roles including leading an NYSE broker dealer with foreign and domestic operations, Chief Risk Officer, Chief Credit Officer and leading Predictive Analytics. Jimmie's successful transition to academia, as a developer and director of top graduate programs and a professor, leveraged his extensive work in industry innovation. Jimmie's recognized expertise in developing leading edge programs, recently testifying before congress on innovation in the US, and leading him to create a donor sponsored open-source Digital Asset research efforts at Duke and to found the Digital Assets@Duke series of global conference's.

PROFESSIONAL AND BUSINESS EXPERIENCE

Lafitte Director of the Master of Engineering in Financial Technology Irene and Frank Salerno Visiting Professor in Financial Economics

Pratt School of Engineering, Duke University Durham, North Carolina

2019 to Present

- Developed, delivered, and marketed the Master of Engineering in Financial Technology, the largest of its kind at an engineering school in the US with application growth exceeding 20%.
- Developed, delivered, and marketed the Master of Engineering in Cybersecurity program to address the needs of industry and governments.
- Lenz recruited and staffed all teaching and staff roles for both programs.
- Research and work in the digital assets space has attracted global attention, leading to building the new donor funded Digital Asset Research and Engineering Collaborative (DAREC).
- Developed and instructed Coursera course to reach early and mid-career learners globally.
- Lenz regularly presents to the Board of Visitors regarding his programs and other activities.
- Created and directed the Master of Engineering in Cybersecurity

Assistant Professor of Finance

University of South Carolina Moore School of Business Columbia, South Carolina 2018 to 2019

- Developed and taught new courses in Machine Learning and Blockchain Technology for the Schools undergraduate students, the first of its kind at a US business school.
- Led the Student Managed Investment Fund, charged with investing funds across a number of asset classes.

Principal

Financial Risk Group Cary, North Carolina

- Led research efforts for global financial services to support specific client needs leveraging a team of individuals with deep subject matter expertise in areas of finance, mathematics, and financial engineering,
- An in-depth knowledge and expertise in data analysis allows for some of the latest methods in machine learning and algorithmic solutions to be applied in areas from operational improvement to regulatory reporting.
- Lenz also led the litigation support efforts of the firm and research efforts including a number of papers.

2017 to 2019

Head of Predictive Analytics Wells Fargo-Wealth and Investment Management Charlotte,

| North Carolina | 2017 |
|--|--------------|
| Director of Technology Risk | |
| Wells Fargo-Wealth and Investment Management Charlotte, North Carolina | 2015 to 2017 |
| Chief Risk and Chief Credit Officer | |
| Wells Fargo Advisors Saint Louis, MO | 2010 to 2015 |

- As the Chief Risk and Chief Credit Officer Lenz was a member of the Executive Committee of the firm with reporting lines to the CEO and Bank Wealth CRO.
- Developed and led a comprehensive risk management group for the recently merged retail brokerage firms of Wells Fargo and First Clearing Correspondent Services, the third largest Broker Dealer in the US, serving foreign and domestic clients of all types.
- Charged with the application of analytics to address opportunities and issues and was instrumental in pursuing the production and deployment of some of the solutions for which Lenz currently has patents pending.
- A track record of developing innovative strategic management and operational methodologies made Jimmie a natural to define and develop the Technology Risk group within this primary channel of the bank.
- Lenz led and participated in regular meeting with federal regulators and participated in policy shaping work resulting from emerging technologies, and the application of these technologies.

Director Banking and Capital Markets

PricewaterhouseCoopers New York, NY

- An in-depth knowledge of the investment industry allowed for the successful management and establishing strategic direction of litigation support engagements with different types of foreign and domestic financial services companies, exchanges, and law firms, often related to regional regulatory activities.
- Development of unique quantitative solutions to identify and assess behaviors related to high-risk credit, trading, and counterparty activities was an emphasis of this role.

Vice President/Quantitative Execution Strategies

Jefferies & Company Saint Louis/New York

- Led an effort to develop, deploy, and integrate the Jefferies quantitative execution strategies (QES) into proprietary and commercial applications.
- Managed the creation, development, and implementation of JETS -Jefferies Electronic Trading Solution, coordinated in-house staff and outside architects/developers.

Co-President, Co-Chief Operating Officer

Bridge Trading, A Reuters Company Saint Louis, Missouri Director of Electronic Trading

Bridge Trading Company Saint Louis, Missouri

- Established strategic tone and managed all areas of an international brokerage firm, providing direction for sales, compliance, management, product, and business development.
- Engaged to develop and manage institutional electronic trading and connectivity on one of the largest proprietary networks.

Expert Witness Experience

Lenz has been engaged in a number of cases, both international and domestic, related to asset pricing, capital markets and trading activity and the prudent management of assets. He has been deposed, as well as presenting findings to regulatory agencies.

2007 to 2010

2004 to 2006

1999 to 2004

EDUCATION

University of South Carolina, Columbia, South Carolina Bachelor of Arts

Washington University in Saint Louis, Saint Louis, Missouri Master of Science in Finance

Washington University in Saint Louis, Saint Louis, Missouri

Doctor of Business Administration-Finance Dissertation:" A Traders Guide to the Predictive Universe- A Model for Predicting Oil Price Targets and Trading on Them"

US Patent 10572332 – Failure Prediction System (Technology Systems) US Patent 11231984 US Patent Pending Publication number: 20210150431 Computer Asset Management US US Patent 10949863B1 -System and method for account abuse risk analysis

Licenses-FINRA Series 4,7,9,10, 24, and 63

Other Roles & Board Memberships

| REIN Insurance Advisory Board | 2020 to Present |
|---|-----------------|
| Horizen Blockchain Foundation Board of Directors | 2019 to 2024 |
| The Washington University Center for Finance and Accounting Research Board Member | 2015 to 2020 |
| University of South Carolina Moore School Risk and Uncertainty Advisory Board Member | 2011 to 2019 |

Select Speaking, Papers, Citations

| 24-Jul | Pricing cryptocurrency options with machine learning regression for handling market volatility Journal of Economic Modeling | Co- Author |
|---------|---|---------------|
| 24-Apr | A Comparison of Cryptocurrency Volatility-benchmarking New and Mature Asset Classes | Co- |
| - | Financial Innovation Journal | Author |
| 24-Oct | Testimony to House Financial Services on Innovation in Financial Services | Presenter |
| 23-Jun | UC Berkeley Future of FinTech and Digital Assets | Presenter |
| 23-Jan | Top 10 Crypto Voices of 2022 | - . |
| 23-Jan | Scripps News Interview | Presenter |
| 22-Oct | Assessing the resiliency of investors against cryptocurrency market crashes through the leverage effect (Economics Letters Vol 220) | Co- Author |
| Podcast | Coffee and Crypto-a topical discussion of the happenings in this new Asset Class (Since 2020) | Host |
| 22-Apr | Association of Corporate Counsel, The Future of Money | Presenter |
| 22-Mar | Crypto Dynamics During Market Downturns: Another DotCom Boom-Bust Cycle? | Co- Author |
| 22-Mar | Keynote Speaker LA Bar Association <i>Trial Advocacy Institute</i> Annual Conference Cryptocurrency in Practice San Diego, CA | Presenter |
| 22-Feb | Bitcoin ETFs: Measuring the Performance of This New Market Niche | Co-Author |
| 22-Jan | National Association of Corporate Directors, Data Security and Privacy | Presenter |
| 22-Jan | Beyond the Memes- How One NFT is Changing the Post Student Experience | Author |
| 21-Dec | Banking in the Digital Age-Developing Smart Policy Around Innovation Duke in DC | Presenter |
| 21-Sep | Technological Advancement in FinTech-How Congress Should Think about Cyber Policy Duke in DC | Presenter |
| 21-Oct | Is Cryptocurrency A Good Investment The Motley Fool | Citation |
| 21-Nov | How To Invest In Blockchain Stocks The Motley Fool | Citation |
| 21-Sep | Advancing Tech-Aligning Policy on Cyber, FinTech and Crypto Duke Government Relations | Presenter |
| 21-Jun | Engineering Financial Technology FDIC Podcast | Interview |
| 21-May | Crypto Derivatives Untitled Investment | Interview |
| 19-May | How Millennials Are Affecting The Price Of Your Home The Conversation | Author |
| 19-Mar | Millennials Are \$1 Trillion In Debt-But They're Better At Saving Than Previous Generations <i>The</i> Conversation | Author |
| 18-Dec | Washington University in St. Louis, Olin Business School Graduation Keynote Speaker | Presenter |
| 18-Nov | "Utilizing machine learning and big data in BSM" Asset & Liability Management | |
| | and Balance Sheet Optimization Conference | Presenter |
| 18-Nov | Estimating Risk Exposures using ML and AI Techniques and Governance of | |
| | Advanced Data Modeling Techniques | |
| | Professional Risk Managers International Association | Presenter |
| 18-Oct | Macroeconomic Effects on The Modeling of Private Capital Cash Flows Financial | |
| | Risk Group | Paper |
| 18-Sep | Current Expected Credit Loss: Why This Expectations Are Different Financial Risk | |
| | Group | Paper |
| 18-Jun | The Operational Controls and Process Tipping Point: Is Machine Learning the | Danar |
| | Answer? Financial Risk Group | Paper |
| 18-May | The McNair Institute Innovation and Free Enterprise Summit | Presenter |
| 18-Apr | "Why Is Trade Desk Surveillance So Challenging?" Financial Risk Group | Paper |
| 18-Feb | Private Capital Cash Flows Financial Risk Group | Paper |
| | | |

| 18-Jan | "Can WE Put A Price ON Higher Education" The Financial Revolutionist | Article |
|----------|--|-----------|
| 18-Jan | Quantifying the Value of Electricity Storage in Dynamic Use Environments Part 1 & | _ |
| 17 Nov | Part 2 | Papers |
| 17-Nov | Risk USA - Understanding Behavior in Models | Presenter |
| 17-Oct | Latham and Watkins- FinTech in Practice | Presenter |
| 17-Oct | Sales Practices-Understanding the Behaviors They Incentivize | Paper |
| 17-Oct | "Sales Practices Under The Microscope" The Financial Revolutionist | Article |
| 17-Jul | "Know Your Customer? Are You Sure?" The Financial Revolutionist | Article |
| 17-Jun | Bank Director Risk and Audit Committee Conference | Presenter |
| 17-Jun | IBM Watson Smarter Risk Summit- Keynote Address | Presenter |
| 17-May | Bank Fintech Partnerships-International Institute for Business and Growth | Presenter |
| 17-May | IP and Innovation Summit -The Faber Institute | Presenter |
| 17-Mar | "Burning Down Markowitz's House" The Financial Revolutionist | Article |
| 16-Dec | "What to Know About the New Fintech Charter" Bank Director | Interview |
| 16-Nov | Washington University Dissertation "A Traders Guide to the Predictive Universe-A | |
| | Model for Predicting Oil Price Targets and Trading on them" | Paper |
| 16-Nov | Davidson College Economic Seminar "How Quantitative Sciences Came to Rule | |
| | Wall Street" | Lecture |
| 16-Nov | Davidson College lecture "The Practical Application of Financial Theory in Banking | |
| | and Brokerage" | Lecture |
| 16-Oct | Washington University Corporate Finance-Risk Management Analytics & General | |
| | Practices | Lecture |
| 16-Jan | "Loss Sequencing in Banking Networks: Threatened Banks as Strategic Dominos" | |
| | (Tran, Vuong, Zeckhauser) Harvard Faculty Papers | Citation |
| 16-Jan | Wealth and Investment Management Research Conference discussant- "Trading | |
| | Costs of Asset Pricing Anomalies" Discussant with Toby Moskowitz | Presenter |
| 16-Jan | "Bank Insider: Cryptofinance Will Not Be the End of Wall Street" Bitcoin.com | Interview |
| 16-Jan | "High-tech ways banks are trying to save seniors from having their money stolen" | |
| | Marketwatch | Interview |
| 15-Nov | Washington University Corporate Finance-Risk Management General Practices | Lecture |
| 15-Nov | Washington University Investment Theory-Risk Management Guiding Principals | Lecture |
| 15-Oct | NICSA "Big Data in the Fund Industry" | Presenter |
| 15-Sep | Compliance and Legal Society-Cybersecurity Panel Moderator | Presenter |
| 15-Jun | Pfeiffer University-Fraud and Forensics Investigation Conference | Presenter |
| 15-May | Keynote Speaker-The University of South Carolina Moore School Graduate | resenter |
| TO-IVIDY | Commencement | Presenter |
| 15-Mar | "The Causal Impact of Market Fragmentation on Liquidity" (Haslag and | Fresenter |
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| 15 Eab | Ringgenberg) Paying it Forward: Washington University, Wells Fargo Advisors partner for a | Citation |
| 15-Feb | | Dracantar |
| | better world | Presenter |

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| | better world | Presenter |
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