J.D JAYARAMAN, Ph.D.

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Livingston, NJ 07039	jjayaraman@njcu.edu	Mobile: (917) 514-4277

QUALIFICATION HIGHLIGHTS

- Subject matter expert on risk management, derivatives, fixed income electronic trading, algorithmic high frequency trading, artificial intelligence and machine learning applications and financial literacy
- Experienced teacher with a track record of high teaching evaluations
- Proven track record of success in building financial systems
- Demonstrated ability to lead, manage and motivate people

EDUCATION

Ph.D.	2021 (expected)	Columbia University, New York, NY	Major: Cognitive Science Minor: Education
Ph.D.	1999	Oklahoma State University, Stillwater, OK	Major: Finance Minor: Economics and Statistics
M.B.A	1992	Bharathidasan Institute of Management, Trichy, India	Major: Finance Minor: Marketing
B.S	1990	College of Engineering Guindy, Anna University, Chennai, India	Major: Computer Science & Engineering Minor: Math

PUBLICATIONS

Jayaraman, J.D., Jambunathan, S. & Counselman, K. (2018). The Connection between Financial Literacy and Numeracy: A Case Study from India. *Numeracy*, Volume 11, Issue 2, Article 5.

Jayaraman, J.D., Jambunathan, S. (2018) Financial Literacy among High School Students: Evidence from India. *Citizenship, Social and Economic Education*, Volume 17, Issue 3. DOI: 10.1177/2047173418809712

Jayaraman, J.D., Jambunathan, S & Adesanya, R (2018). Financial literacy and classroom practices among early childhood and elementary teachers in India and the US, *Education 3-13*, DOI: 10.1080/03004279.2018.1533030

Jayaraman, J.D (2018) Teaching Financial Literacy Using Computational Thinking. *Proceedings of the 45th Annual Conference of the Northeast Business and Economics Association*. Stockton, NJ

Jayaraman, J.D, Gerber, S & Garcia, J. (2018). Mining Advisor Notes to Identify At-Risk Students. *Proceedings of the 14th Annual National Symposium on Student retention, Salt Lake City, UT*.

Jayaraman, J.D., Gerber, S., & Garcia, J. (2019) Supporting Minority Student Success Using Machine Learning to Identify At-Risk Students. *Proceedings of the 12th International Conference on Educational Data Mining*.

Jayaraman, J.D, Gerber, S & Garcia, J. (2019). Predicting Minority Student Dropout using Data Mining Techniques. *Proceedings of the 15th Annual National Symposium on Student retention,* New Orleans, LA.

Jayaraman, J.D & Koranteng, E. (2019) Does Celebrity Social Media Sentiment Predict Stock Market and Cryptocurrency Returns? *Proceedings of the 46th Annual Conference of the Northeast Business and Economics Association*, Newport, Rhode Island.

Jayaraman, J.D, Ramakrishna, S & Narasinganallur, N. (2020) The Role of Board Gender Diversity on Firm Performance: Evidence from India. *Proceedings of the 9th Annual SIMSR International Finance Conference (SIFICO - 2020)*, Mumbai, India.

Jayaraman, J.D (2020) Predicting Student Dropout by Mining Advisor Notes. *Proceedings of the 13th International Conference on Educational Data Mining*.

Jayaraman, J.D & Dennis, A. (2020) Can Earnings Call Sentiment Predict Stock Price Movement? *Proceedings of the 47th Annual Conference of the Northeast Business and Economics Association*.

Jambunathan, S., **Jayaraman, J.D**, Adesanya, R. (2020). Comparison of Ethical Beliefs about Classroom Ethical Practices among Early Childhood Teachers in India and the USA: An Exploratory Study. *Education 3-13*. DOI: 10.1080/03004279.2020.1841812

Jambunathan, S, **Jayaraman, J.D**, Jayaraman, A., & Jayaraman, K (2020) Is Peer Led Discovery-Based Learning Effective in Promoting Leadership Skills among Middle School Children? Evidence from India. *Education 3-13,* DOI:10.1080/03004279.2020.1733041

Jambunathan, S., **Jayaraman, J.D**. (2019). Perception of Self-competence and Social Acceptance of Street Children in India. *Journal of the International Association of Special Education*. Volume 19, Issue 1.

Jambunathan, S., **Jayaraman, J. D**., Jayaraman, K., & Jayaraman, A. (2019). Effect of Peer-Led Leadership Workshops on Leadership Skills among Middle School Students in India. *Journal of Research in Childhood Education*, 1-15.

Mokashi, A.J., **Jayaraman, J. D**., Baliga, R.S., & Narasinganallur, N. (2019) Indian Inland Water Transport (IWT): Analyzing the Gap Between Potential and Performance. in "Supply Chain in the New Environment of Industry 4.0." *Proceedings of the SIMSR-POMS International Conference 2019*, Mumbai, India

Jambunathan, S., & **Jayaraman, J.D**. (2015). Identification of Gifted Children in India: A preliminary study. *International Journal for Talent Development and Creativity*, Volume 3, Number 1, 111-118.

PRESENTATIONS

Jayaraman J.D., & Black, J. (2021) Effectiveness of an Intelligent Question Answering System for Teaching Financial Literacy: A Pilot Study. Paper to be presented at the The Learning Ideas Conference, Virtual, June 2021.

Jayaraman J.D., & Black, J. (2021) An Intelligent Question Answering System for Teaching Financial Literacy. Paper to be presented at the American Educational Research Association (AERA) annual conference, Virtual, Apr 2021.

Jayaraman, J.D & Dennis, A (2020) Can Earnings Call Sentiment Predict Stock Price Movement? Paper presented at the Northeast Business and Economic Association Conference, Virtual, Nov 2020.

Jayaraman, J.D (2020) Predicting Student Dropout by Mining Advisor Notes. Poster presented at the 13th International Educational Data Mining (EDM) conference, July 2020.

Jayaraman J.D., & Black, J. (2020) A Constructionist Approach to Teaching Financial Literacy. Paper to be presented at the American Educational Research Association (AERA) annual conference, San Francisco, Apr 2020 (cancelled due to COVID)

Jayaraman, J.D., Ramakrishna, S & Narasinganallur, N. (2020) The Role of Board Gender Diversity on Firm Performance: Evidence from India. Paper presented at the 9th Annual SIMSR International Finance Conference (SIFICO - 2020), Mumbai, India.

Jayaraman, J.D., & Amand, P. (2019) Board Gender Diversity and Firm Performance: A Comprehensive Evaluation. Paper presented at the Financial Management Association (FMA) conference, New Orleans, Oct 2019.

Jayaraman, J.D., Gerber, S., & Garcia, J. (2019) Predicting Minority Student Dropout Using Data Mining Techniques. Paper presented at the National Symposium on Student retention, New Orleans, Oct 2019.

Jayaraman, J.D & Emmanuel, K (2019) Does Celebrity Social Media Sentiment Predict Stock Market and Cryptocurrency Returns? Paper presented at the Northeast Business and Economic Association Conference, Newport, RI, Oct 2019.

Jayaraman, J.D., Gerber, S., & Garcia, J. (2019) Supporting Minority Student Success Using Machine Learning to Identify At-Risk Students. Poster presented at the 12th International Educational Data Mining (EDM) conference, Montreal, Canada.

Jayaraman J.D (2019) Innovative Ways of Teaching Financial Literacy. Paper presented at the Accreditation Council for Business Schools and Programs (ACBSP) Conference, Houston, TX.

Jayaraman J.D., & Black, J. (2019) Teaching Financial Literacy with Computational Thinking. Paper presented at the American Educational Research Association (AERA) annual conference, Toronto, Canada.

Jayaraman J.D., & Black, J. (2019) Teaching Financial Literacy with Game Design. Paper presented at the Subway Summit on Cognition and Education Research, New York, NY, May, 2019.

Jayaraman, J.D., Gerber, S., & Garcia, J. (2018) Mining Advisor Notes to Identify At-Risk Students. Paper presented at the National Symposium on Student retention, Salt Lake City, UT, Nov 2018.

Jayaraman, J.D (2018) Teaching Financial Literacy using Computational Thinking. Paper presented at the Northeast Business and Economic Association Conference, Stockton, NJ, Oct 2018.

Jayaraman J.D., & Black, J. (2018) Teaching Financial Literacy with Game Design. Paper presented at the American Educational Research Association (AERA) annual conference, New York, NY.

Jayaraman J.D., & Black, J. (2018) Financial Literacy and Game Design. Poster presented at the Psychology@TC Annual Conference, New York, NY, April, 2018.

Jayaraman, J.D., Amand, P. & Koranteng, E (2018) Can Celebrity Tweets Predict Stock Prices. Poster accepted at the INFORMS Conference on Business Analytics and Operations Research. Baltimore, MD

Jayaraman, J.D., Gerber, S., & Garcia, J. (2018) A Decision Support System for Student Retention based on Machine Learning. Poster presented at the Association for Institutional Research Forum, Orlando, FL

Jayaraman, J.D., & Jambunathan, S. (2018) Comparison of financial knowledge and classroom practices among teachers in India and the United States. Poster presented at the National Association of Education of Young Children (NAEYC) Professional Learning Institute Conference. Austin, TX

Jayaraman J.D., & Black, J. (2018) Teaching Financial Literacy Using Game Design. Paper presented at the Subway Summit on Cognition and Education Research, New York, NY.

Jayaraman J.D., & Overton, R. (2017) Innovative Ways of Teaching Financial Literacy: Lessons from Teaching Financial Literacy to College Freshmen. Paper presented at Council for Economic Education Annual Meeting, Brooklyn, NY.

Jayaraman J.D., & Jambunathan, S. (2017) Are early childhood teachers prepared to teach financial literacy? Poster presented at the National Association of Early Childhood Teacher Educators (NAECTE) Conference. Atlanta, GA

Jayaraman J.D., & Jambunathan, S. (2017) Financial Literacy among Lower Socio-economic High School Girls in India. Paper accepted at the 15th Biennial International Association of Special Education (IASE) Conference. Perth

Jayaraman J.D., & Lee, E. (2017) Implementing an Interdisciplinary Business Analytics and Data Science Program at an Urban University. Paper presented at the 2017 INFORMS Annual Conference in Houston, TX.

Mokashi, A., **Jayaraman, J.D**., Mahakul, R. & Patel, R. (2020) Global Perception of the Belt and Road Initiative: A Natural Language Processing Approach. 61st Annual Transportation Research Forum, Jersey City, NJ (cancelled due to COVID).

Jambunathan, S., **Jayaraman, J.D**., Jayaraman, A., & Jayaraman, K (2021). Using Peer Led Workshops in Improving Financial Literacy of Elementary School Children. Paper to be presented at the Annual American Educational Research Association (AERA) Meeting, Virtual.

Jambunathan, S., **Jayaraman, J.D**., Jayaraman, A., & Jayaraman, K (2019). Is Peer Led Workshops Effective in Improving Financial Literacy of Elementary and Middle School Children? Roundtable Session at the Annual American Educational Research Association (AERA) Meeting, Toronto, Canada.

Mokashi, A.J., **Jayaraman, J. D**., Baliga, R.S., & Narasinganallur, N. (2019) Indian Inland Water Transport (IWT): Analyzing the Gap Between Potential and Performance. in "Supply Chain in the New Environment of Industry 4.0." Paper presented at the SIMSR-POMS International Conference 2019, Mumbai, India.

Jambunathan, S, **Jayaraman, J.D**, Jayaraman, K., & Jayaraman, A. (2018) Effect of Peer-led Leadership Workshops on Leadership Skills among Middle School Students in India. Paper presented at the American Educational Research Association (AERA) annual conference, New York, NY.

Jambunathan, S., **Jayaraman, J.D**., Krishnan, M., Dhanasekaran, C., Mallikarjunan, M., Roselet, J., and Srinivasan, V. (2014). Brief Intelligence Measure to Identify Gifted and Talented Children in India. Poster presented at the Biennial Conference of the Association of Childhood Education International, Vancouver, Canada

Jambunathan, S., **Jayaraman, J.D**., and Sparatta, M. (2013). Identification of Gifted and Talented Children in Impoverished Neighborhoods in India. Poster presented at the Annual Meeting of the National Association for the Education of Young Children, Washington D.C

Session Chair

Financial Management Association Annual Conference (2020)
Financial Management Association Annual Conference (2018)
Financial Management Association Annual Conference (2017)
Subway Summit on Cognition and Education Research (2018)

Paper Discussant

Financial Management Association Annual Conference (2018)

AWARDS

Institutional Research Leadership in Student Retention Award won by the paper presentation Jayaraman, J.D., Gerber, S., & Garcia, J. (2019) Predicting Minority Student Dropout Using Data Mining Techniques. National Symposium on Student retention, New Orleans, Oct 2019.

PROFESSIONAL EXPERIENCE

New Jersey City University, Jersey City, NJ   **Sept 2015 - Present**
Associate Professor and Co-Chair, Department of Finance and Data Science
Academic Advisor, Institute for Financial Literacy and Economics Education
Teaching several courses in data science and finance.

New Jersey City University, Jersey City, NJ   **Jan 2009 – May 2015**
Adjunct Professor, Department of Finance
Taught the following graduate courses in the master's in finance program
- Investment Planning and Portfolio analysis
- Analysis of Debt Investments
- Derivatives and Alternate Investments

Bloomberg L.P., New York, NY   **June 2007 – Aug 2015**
Global Business Manager, Models and Analytics   **Jan 2014 – Aug 2015**
I was responsible for implementing various fixed income algorithmic trading models and analytics for the sell side trading systems business.

Global Business Manager, Risk Management   **June 2007 – Dec 2013**
I was responsible for building and growing the risk management solutions business, within the trading solutions group. The software is used by over one hundred clients around the world.

Citigroup, New York, NY   **Nov 2004 – May 2007**
Senior Vice President, Risk Management
Managed a team of business analysts in implementing and delivering BASLE II, credit risk and market risk related projects.

Sungard Energy Systems, New York, NY   **May 1999 – Oct 2004**
Sungard Energy Systems is a division of Sungard Data Systems, a $2B software company. Sungard acquired Caminus Corporation in January 2002.

Director, Product Management   **January 2002 – Oct 2004**
Managed the product management group, consisting of quantitative analysts and developers, in the design and development of advanced risk analytics products for the energy trading market.

Caminus, New York, NY
Product Manager – Risk Analytics   **July 2000 – December 2001**
Was an integral part of the team that designed and developed one of the first software products for measuring and monitoring risk for power and natural gas trading.

Caminus, New York, NY
Project Manager, Professional Services   **May 1999 – June 2000**
Responsible for managing implementations of the Zainet energy risk management suite of products.

C·ATS Software Inc, Palo Alto, CA   **June 1996 – December 1998**
C·ATS Software was a leading provider of trading and Risk Management software to the banking sector.

Product Manager   **December 1996 – December 1998**
Responsible for designing, developing and marketing the complete front to back office foreign exchange trading and risk management module of the C·ATS suite of products. The FX product generated over a million dollars in license revenue during my tenure.

Senior Quality Assurance Engineer   **June 1996 – November 1996**
Tested and validated option pricing models.

<div align="center">SERVICE</div>

- Chair, Data Science Committee, New Jersey City University, Fall 2015
- Chair, Data Science Faculty Search Committee, New Jersey City University, Fall 2016, Fall 2017, Fall 2018
- Provost search committee, New Jersey City University, Fall 2018
- Graduate Studies Senate Committee, New Jersey City University, Summer 2016 - present
- Freshmen Student Success Academy Task Force, New Jersey City University, Spring 2015 – present
- ACE Internationalization Task Force, New Jersey City University, Fall 2016 - present
- Institutional Review Board (IRB) Committee, New Jersey City University, Fall 2015 - present
- South Asian Advisory Board, New Jersey City University, Fall 2015 - 2017
- Department of Finance Curriculum Committee, New Jersey City University, Fall 2015 - present

- Department of Finance Assessment Committee, New Jersey City University, Fall 2015 - 2017
- CEO, EdGift Foundation (www.edgift.org). A nonprofit dedicated to empowering disadvantaged girls. 2010 - present
- Board member, New Jersey Council for Economic Education, 2017 - present
- Vice President, Research Collaboration Committee, New Jersey Big Data Association, 2017 - present
- Chair, Sixth Annual NJBDA Symposium, Apr 5, NJCU
- Reviewer for conference presentations and Journal Publications: American Educational Research Association, Financial Management Association, Numeracy, Teacher Educator

GRANTS

- Specially Budgeted Research Grant, New Jersey City University, 2016-2017
- Specially Budgeted Research Grant, New Jersey City University, 2018-2019

INVITED TALKS

- Industry Applications of Machine Learning, Panel Discussion, New Jersey Big Data Alliance (NJBDA) Annual Symposium, April 2018.
- Machine Learning – A non-technical overview, Talk at TAP academy Fidelity Investments, May 2018.
- Current Trends in Financial technology, Talk at Somaiya Institute of Management, Mumbai, India, Jan 2020

TECHNICAL EXPERTISE

- Languages – C++, C, Visual Basic, Java, JavaScript, Python, R
- Databases – Oracle, SQL Server, Sybase, MySQL, MongoDB
- Software – SAS, Excel VBA, Matlab, SPSS, D3
- Operating Systems – Unix, Linux, Windows