James A. DiLellio, Ph.D., M.B.A.

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714-403-0085

EDUCATION

July 1994 - June 1997 **Northwestern University** Evanston, Illinois
Ph.D. – Program in Applied Mathematics, College of Engineering and Applied Science
Advisor: *W. Edward Olmstead*

January 2004 - Dec 2007 **Pepperdine University** Irvine, California
M.B.A. – Finance Emphasis

August 1993 - June 1994 **Northwestern University** Evanston, Illinois
M. S. – Program in Applied Mathematics

August 1989 - May 1993 **University of Akron** Akron, Ohio
B. S. – Applied Mathematics, *Summa Cum Laude*

TEACHING EXPERIENCE

August 2023 - Present **Pepperdine University** Irvine, West LA, and Malibu California
Professor of Decision Sciences Department of Decision Sciences

August 2016 - August 2023 **Pepperdine University** Irvine, West LA, and Malibu California
Associate Professor of Decision Sciences Department of Decision Sciences

- Piloted course "Python for Business Analytics" for Bachelor of Science in Management students.

August 2012 - August 2016 **Pepperdine University** Irvine, West LA, and Malibu California
Assistant Professor of Decision Sciences Department of Decision Sciences

- Taught undergraduate business students "Statistical Methods and Research Design" and MBA students "Quantitative Analysis for Business Operations", "Financial Modeling", and "Valuation of Real Options".
- Served on program committees, administrative committees, and university-wide technology and learning steering committees.
- Taught students using blended learning pedagogies by adapting the curriculum to include synchronous and asynchronous components.

August 2008 - August 2012 **Pepperdine University** Irvine & West LA, California
Practitioner of Decision Sciences, Blended Learning Fellow Department of Decision Sciences

- Taught fully employed MBA students "Quantitative Analysis for Business Operations". Topics included optimization, queuing theory, project management, and regression. Achieved consistently high student evaluations and positive feedback on course curriculum.
- Taught undergraduate business students "Statistical Methods and Research Design". Topics included descriptive statistics, probability distributions, hypothesis testing, and other fundamental business statistics concepts. Achieved consistently high student evaluations and positive feedback on course curriculum.
- Mentored fully employed MBA and BSM program students on career issues.
- Supported lead faculty member for Business Integration Simulation. Provided oversight, student feedback, and grades on evidence-based decision analysis portions of the business simulation.

April 2008 - August 2008 **Pepperdine University** Irvine, California
Adjunct Professor Department of Decision Sciences

- Taught fully employed MBA students "Quantitative Analysis for Business Operations".

August 1994 - June 1995 **Northwestern University** Evanston, Illinois
Teaching Assistant Department of Engineering Science and Applied Mathematics

- Assisted professors in teaching calculus and differential equations, including grading and homework review. Taught weekly reviews of important points and facilitated problem-solving exercises.

August 1989 - June 1990 **University of Akron** Akron, Ohio
Tutor University Tutoring Center

- Assisted university students in completing their required mathematical curriculum required for graduation. Led small groups of student-athletes through mathematical and statistical problem-solving exercises.

SUMMARY OF RESEARCH INTERESTS & TEACHING PHILOSOPHY

My primary areas of research interest include applied mathematics, computation, and statistical methods associated with engineering, finance, and investing. My greatest interest is the application of numerical methods, optimal estimation, Kalman filtering theory, and nonlinear optimization within these areas to link key concepts with quantitative models to deepen my understanding of the leading order factors.

My teaching philosophy is based on a fundamental belief in the importance of education within society, particularly as we move into the information age. I also recognize that good teaching can have a significant positive impact on an individual's life by creating opportunities for growth and prosperity. Ultimately, the pride I have in my job as a teacher lies in the growth of the student made during their time in my classroom and their ability to use what they've learned in their future careers and throughout their life.

PUBLICATIONS IN PEER-REVIEWED JOURNALS

DiLellio, J. and Simon, A. (2023 or 2024) "Seeking Tax Alpha in Retirement Income", to appear in *Financial Services Review*.

McQuerrie, E. and DiLellio, J. (2023) "The Arithmetic of Roth Conversions", *Journal of Financial Planning*, May.

Stanley, D., Kinsman, M., Kownatzki, C. and DiLellio, J. (2021) "Is the Dow Jones Industrial Average Even Weak-Form Market Efficient?". *Journal of Accounting and Finance*, 21(1).

DiLellio, J. and M. Kinsman "The SECURE Act and your Retirement Objectives", *Graziadio Business Review*, **23**(2), 2020.

DiLellio, J. and D. Ostrov "Toward constructing tax efficient withdrawal strategies for retirees with traditional 401(k)/IRAs, Roth 401(k)/IRAs, and taxable accounts", *Financial Services Review*, **28**, 2020, p. 67-95.

DiLellio, J. "Risk and Reward of Fractionally-leveraged ETFs in a Stock/Bond Portfolio". *Financial Services Review*, **27**(4), 2018, p. 413-432.

W. J. Hahn, J. A. DiLellio, and J. S. Dyer, "Risk Premia in Commodity Price Forecasts and their Impact on Valuation", *Energy Economics,* May 2018.

J. A. DiLellio and D. Ostrov, "Optimal Strategies for Traditional vs. Roth IRA/401(k) Consumption During Retirement", *Decision Sciences*, April 2017.

J. A. DiLellio and P. M. Goldfeder, "Is There a Free Lunch in Commission-Free ETFs?", *Graziadio Business Review* **19**, No. 2, 2016.

W. J. Hahn, J. A. DiLellio, and J. S. Dyer, "Market-calibrated Forecasts for Natural Gas Prices", *Energy Institute at the University of Texas at Austin*, 2016.

J. A. DiLellio and J. Forsyth, "Possible Evidence of Income falsification on Mortgage Application During The Housing Bubble", *Journal of Business and Finance Research*, **5**, No. 2, 2016.

J. A. DiLellio, R. Hesse and D. J. Stanley, "Portfolio Performance with inverse and leveraged ETFs", *Financial Services Review*, **23,** No. 2, 2014, p.123-149.

L. Efremidze, J. A. DiLellio, and D. J. Stanley, "Using VIX Entropy Indicators for Style Rotation Timing", *Journal of Investing,* **23** No. 3, Fall 2014, pp. 130-143.

J. Hahn, J. A. DiLellio and J. Dyer, "What do market-calibrated stochastic processes indicate about the long-term price of crude oil?", *Energy Economics*, **44**, July 2014, p. 212-221.

J. A. DiLellio and J. Forsyth, "Government-Sponsored Enterprises and Income Falsification on Mortgage Applications", *International Journal of Business, Accounting and Finance*, April 2014.

J. A. DiLellio, "A Kalman Filter Control Technique in Mean-Variance Portfolio Management", *Journal of Economics and Finance*, Online October 2012, **39**, pp. 235-261, 2015.

J. A. DiLellio and D. J. Stanley, "ETF Trading Strategies to Enhance Client Wealth Maximization", *Financial Services Review,* ***20,*** 2011, p. 145-163.

J. A. DiLellio, "What to do when Traditional Diversification Strategies Fail - Revisited", *Graziadio Business Review*, **13**, No. 4, 2010.

J. A. DiLellio, "A hybrid GNSS integrity design leveraging a priori signal noise characteristics", *Journal of Navigation*, **63**, No. 3, 2010, p. 513-526.

J. A. DiLellio, "What to do when Traditional Diversification Strategies Fail", *Graziadio Business Report*, **12**, No. 4, 2009.

J. A. DiLellio and W. E. Olmstead, "Numerical Solution of Shear Localization in Johnson-Cook materials". *Mechanics of Materials*, **35**, 2003, p. 571-580.

J. A. DiLellio and W. E. Olmstead, "Numerical Solutions of Shear Localization on a Finite Slab", *Mechanics of Materials*, **29**, No. 2, 1998, p. 71-80.

J. A. DiLellio and W. E. Olmstead, "Temporal Evolution of Shear Band Thickness", *Journal of Mechanics and Physics of Solids*, **45**, March 1997, p. 345-359.

J. A. DiLellio and W. E. Olmstead, "Shear Band Formation Due to a Thermal Flux Inhomogeneity", *SIAM Journal on Applied Mathematics*, **57**, August 1997, p. 959-971.

J. A. DiLellio and G. W. Young, "An Asymptotic Model of the Mold Region in a Continuous Steel Caster", *Metallurgical & Materials Transactions B*, **26B**, December 1995, p. 1225-1241.

CONTRACTS AND GRANTS

Fulbright Research Scholar - Evaluating long-term investments in emerging energy technologies in the United Kingdom. 2023-24.
Pepperdine University Grant Award - Faculty Innovation in Technology and Learning. Received funding to continue the development of a tablet-based interactive e-textbook for business statistics. 2012-2013.

TEXTBOOKS

DiLellio, J (2022) Real Option Modeling and Valuation: A Decision Analysis Approach using DPL and Excel, 3rd Edition. Published as eTextbook on Google Play books and. Published as print and Kindle Edition on Amazon.
DiLellio, J. and Hall, O., (2014) StatCity: Statistical Methods for Business Practitioners, Volume 1 and Volume 2, 2nd Edition, Published by Google.
DiLellio, J. and Hall, O. (2014) StatCity, 2nd Edition, published by Apple iTunes.

EDITORIAL REVIEW ACTIVITIES

Associate Editor, *Financial Services Review* (2020-present)
Editorial Board, *Financial Planning Review* (2023-present)
Reviewer board member, *Journal of Risk and Financial Management* (2021-present)
Peer-reviewed paper "Evidence of potential insider trading on COVID-19 vaccine testing results", *Journal of Risk and Financial Management,* Summer 2022.
Peer-reviewed paper "The Impact of Health Impairment on Optimal Annuitiation for Retirees", *Risks,* Spring 2022.
Peer reviewed paper "Diversification, Managerial Incentive and Capital Structure of the Firm", *Managerial Finance,* Winter 2021.
Blind reviewed paper "Market Timing of the FTSE China A50 index using sample entropy", *Journal of Economic Studies,* Spring 2021.
Blind reviewed paper "Diversification, Managerial Incentive and Capital Structure of the Firm", *Managerial Finance,* Spring 2021.
Peer-reviewed paper "Three-factor commodity forward curve model and its joint P and Q dynamics", *Energy Economics,* Spring 2021.
Blind reviewed paper "Structural transformation of the Saudi economy under global climate action", *Energy Journal*, Summer and Fall 2020.
Blind reviewed paper "ETFs and Wealth Advisors: What is the missing link?", *International Journal on Financial Services,* Winter 2020.
Blind reviewed paper "A Comparison Study of Individual Retirement Income Bucket Strategies", *Financial Services Review,* Winter 2020.
Peer-reviewed paper "Volatility and Liquidity on High-Frequency Electricity Futures Markets: Empirical Analysis and Stochastic Modeling", *Energy Journal*, November 2019.
Peer-reviewed paper "Financial Analysis of the Grid-Integrated Energy Storage System in Developing Country for Cheaper Electricity Supply: A Real Case Study in Malaysia", *Energy Journal*, March 2019.
Peer review of a revision to "Long-Term Forecasts for Energy Commodities Price: What the Experts Think", *Energy Economics*. August 2019.
Blind reviewer of " Earnings Management in Banks: An Analysis of Reduced Interest Rate Policies *Decision Sciences Institute conference proceedings*, July 2019.
Blind Manuscript Review, "Long-Term Forecasts for Energy Commodities Price: What the Experts Think", *Energy Economics*, October 2018 and Spring 2019.
Blind Manuscript Review, "Time-Varying Rare Disaster Risks, Oil Returns and Volatility", *Energy Journal*, January 2018.
Blind Manuscript Review, "Portfolio insurance using leveraged ETFs", *Financial Services Review*, November 2017.
Blind Manuscript Review, "The Impact of the Capitalization of Operating Leases: A Guide for Individual Investors", *Financial Services Review*, February 2017.
Blind Manuscript Review, "Corporate Earnings: Management, Manipulation, or Misrepresentation?", *Graziadio Business Review*, February 2017.
Blind Manuscript Review, "Hedged ETFs: Do They Add Value?", *Financial Services Review*, December 2015.
Manuscript Review, "A Bootstrap Inference for Predictive Regression: Can Dividend Yield Predict Stock Return", *Quantitative Finance*, November 2015.
Blind Manuscript Review, "Is a VIX ETP an Investment in the VIX?", *Financial Services Review*, August 2015.
Blind Manuscript Review, "A Marginal Cash Flow Analysis of Mortgagors' Choices", *Financial Services Review*, March 2015.
Manuscript Review, "Large Scale Parameter Estimation for Oil Price Forecasting Using Ensemble Kalman Filters", *Energy Economics*, August 2014.
Blind Manuscript Review, "International Diversification Among Islamic Investments: is there any benefit?", *Managerial Finance*, November 2013 and January 2014.

Blind Manuscript Review, "Regional Collaboration Innovation Capability In China from Innovation Actors Angle - Based on AHP and Cluster Analysis", *Technology in Society*, June 2013.
Blind Manuscript Review, "Impact of Online Review on Mobile App Sales", *Pacific Asia Conference on Information Systems* 2013, March 2013.
Blind Manuscript Review, "The Global Economy is Open for Business", *Graziadio Business Review*, May 2012.
Blind Manuscript Review, Manuscript ID FSR201135 "Empirical Analysis of ETF Intraday Trading", *Academy of Financial Services - Financial Services Review*, September 2011.
Blind Peer Review, Manuscript ID ICIS-0214-2011, "Can Project Management Maturity Endure Project Risk? A Strategic Perspective of IS Project Success", *International Conference on Information Systems 2011*, June 2011.
Blind Peer Review "Firms' Value Study Out of The Ordinary: Evidence from Taiwan," *DSI Annual Meeting*, May 2011.
Blind Peer Review, "Log-Robust Portfolio Management Strategies that Outperform the 1/n Strategy," *Decision Science Institute Annual Meeting*, May 2011.
Manuscript review "Show Us the Money: Local Economic Multipliers and Leakage in the Digital Age," *Global Business Development Institute 14th international conference*, March 2011.
Manuscript Review, Manuscript ID RQUF-2010-0284, "Application of random walk model to FTSE 100 index from April 1984 to July 2010", *Quantitative Finance*, August 2010.
Blind peer review, "IT-enabled Innovation: How Does the CIO Role Matter?", *Intl Conf. on Info. Systems 2010*, June 2010.
Blind peer review, "Aligning Information Security Program Objectives and Deployment with Organizational Culture for Increased Success", *2010 Decision Science Institute Annual Meeting*, May 2010.
Manuscript review (MS#072791), "Effective Equations for Localization and Shear Band Formation", *SIAM Journal of Applied Mathematics*. Society of Industrial and Applied Mathematics, August 2008.

LICENSES

Series 65: Uniform Investment Adviser Law Exam, April 21, 2007.

PATENTS GRANTED

- "GPS Navigation System with Integrity and Reliability Monitoring Channels", Patent Number 7,400,292, granted on July 15, 2008.
- "Global Positioning System Accuracy Enhancement", Patent Number 7,969,352, granted on June 28, 2011.

PRESENTATIONS AND PUBLICATIONS IN CONFERENCE PROCEEDINGS

- PGBS Poster Pitch, Summer 2023. "Valuation of Emerging Clean-energy Technologies".
- 6the Annual Academic Resources Colloquium sponsored by the Certified Financial Planners Board, November 2022, Washington DC. "Seeking tax alpha in retirement income".
- The Academy of Financial Services Annual Meeting, online, September 2022. "Seeking tax alpha in retirement income".
- PGBS Poster Pitch, Summer 2022. "A Real Option Approach to Valuing a Roth Converstion".
- The Academy of Financial Services Annual Meeting, online, October 2021. "Optimizing Mulit-Generational Value using Private Placement Life Insurance".
- PGBS Poster Pitch, Summer 2021. "Seeking a globally optimal retirement decision".
- The American College Conference, Janary 2021. "A deep dive on Retirement Drawdown Decisions".
- The Academy of Financial Services Annual Meeting, online, October 2020. "The SECURE Act and your retirement objectives".
- The Decision Sciences Institute Annual Meeting, New Orleans, Louisiana, November 2019. "Seeking Global Optimal Decisions in Retirement Economics". Chaired session.
- The Decision Sciences Institute Annual Meeting, New Orleans, Louisiana, November 2019. "Detecting Students at Risk using Machine Learning: Applications to Business Education". Chaired session.
- Aspire 2025 Series, October 2018. "Constructing Tax-Efficient Withdrawal Strategies for Retirees".
- The Academy of Financial Services, Chicago, Illinois, October 2018. "Risk and Reward of Fractionally-leveraged ETFs in a Stock/Bond Portfolio".
- The Academy of Financial Services, Chicago, Illinois, October 2018. "Constructing Tax-Efficient Withdrawal Strategies for Retirees with Traditional 401(k)/IRAs, Roth 401(k)/IRAs, and Taxable Accounts".
- Pepperdine Graziadio Academic Forum Poster Pitch, July 10, 2018. "Bootstrapping versus geometric Brownian motion: A tale of two simulation models for portfolio analysis".
- Institute for Operations Research and Management Sciences (INFORMS), Analytics conference, Baltimore, MD, April 2018. "Bootstrapping versus geometric Brownian motion: A tale of two simulation models for portfolio analysis".
- The Decision Sciences Institute, Washington D.C., November 2017. "Technology Driven Operations Management Education".

- The Decision Sciences Institute, Washington D.C., November 2017. "Online Proctoring Tools – an evaluation for online quantitative courses".
- The Western Association of Schools and Colleges (WASC), Academic Resource Conference, April 20, 2017. "Assessing the Impact of Telepresence Robots on Management Education".
- The Decision Sciences Institute, Austin, Texas, November 2016. "Enhancing Management Education via Intelligent Tutors", (with O. P. Hall).
- The Decision Sciences Institute, Austin, Texas, November 2016. "Insights from Converting a Hybrid to Online Undergraduate Business Statistics Course".
- The Decision Sciences Institute, Austin, Texas, November 2016. "Market-Calibrated Forecasts for Natural Gas Prices", (with W. J. Hahn and J. Dyer).
- The Academy of Financial Services, Orlando Florida, October 2015. "An Exact, Optimal Strategy for Traditional vs. Roth IRA/401(k) Consumption During Retirement".
- The Western Association of Schools and Colleges (WASC), Academic Resource Conference, April 23, 2015. "Crowdsourcing Management Education".
- The American Association of Individual Investors, Los Angeles, California. June 21, 2014. "Are you better off with commission-free ETFs?" http://www.aaiilosangeles.org/SkirballPresentations/JamesDiLellio_CommFreeETFs%20-%20June%202014.pdf
- The Academy of Financial Services, Chicago, Illinois. October 17, 2013. "Commission-free Exchange-traded Funds - Are individual investors always better off?". (with P. Goldfeder) Paper published in conference proceedings at http://academyfinancial.org/wp-content/uploads/2014/01/E2_DiLellio_Goldfeder.pdf
- The Academy of Financial Services, San Antonio, Texas. October 1, 2012. "Market Timing for ETF Style Rotation through the use of Entropy Analytics and the VIX Index" (Presented by L. Efremidze, with D. Stanley).
- *The International Academy of Business and Public Administration, Honolulu, Hawaii*. August 1, 2012. "GSEs and Income Falsification on Mortgage Applications" (presented by J. Forsyth). Paper published in conference proceedings.
- *DSI Annual meeting – Award Competition Entry, Boston, Massachusetts.* November 20, 2011. "An Optimal Control Technique in Constrained Mean-Variance Portfolio Optimization". Paper published in conference proceedings.
- *DSI Annual meeting* – Contributed abstract, Boston, Massachusetts. November 21, 2011. "Optimizing retirement withdrawals from accounts with different tax structures" (with D. Ostrov).
- *The Academy of Financial Services, Las Vegas, Nevada,* October 2011. Presented (with D. Stanley and R. Hesse) "Risk and Opportunities of Inverse ETFs for Long Term Investors". Paper published in conference proceedings.
- *INFORMS Annual Meeting, Charlotte, North Carolina,* November 13, 2011. Co-authored presentation "Parameter Estimation for Two-factor Commodity Price Models" (Presented by J. Hahn, with J. Dyer).
- *SIAM Conference on Financial Mathematics & Engineering, San Francisco, California*. November 19, 2010. Presented "Controlling Portfolio Allocation Using a Kalman Filter and Multi-Factor Model Framework".
- *Decision Science Annual Meeting, San Diego, California*. November 23rd, 2010. Presented "A Four-factor Equity-debt Model for Dynamic Asset Allocation along an Efficient Frontier".
- *2010 Southern California OR/OM day at UC Irvine, Irvine, California.* May 21, 2010. Presented "Kalman Filter Control Techniques in Portfolio Construction". Co-hosted by UC Irvine and Pepperdine University.
- *Southwest Decision Sciences Institute Annual Meeting*, *Houston, Texas,* March 2010. Presented "An Empirical Study of Kalman Filter Control Techniques in Mean-Variance Portfolio Optimization". Abstract published in conference proceedings.
- *The Academy of Financial Services, Anaheim, California,* October 2009. Presented (with D. Stanley) "The Financial Planner, Exchange Traded Funds, and ETF Trading Strategies to Enhance Client Wealth Maximization". Paper published in conference proceedings.
- *The Institute of Navigation International Technical Meeting*, *Anaheim, California*, January 2009. Presented "An Optimized RAIM approach and performance characterization in the presence of non-Gaussian error sources", and published paper in conference proceedings.
- *International Space University Symposium, Strasbourg, France*, May 2003. Presented "The Use of Global Navigation Systems in the Aviation Industry", and published a paper in symposium proceedings.
- *Joint Navigation Conference 2003, Las Vegas, Nevada*, April 2003. Presented "Signal-in-Space User Range Error Assessment via Combined Space and Ground-based Measurement Data".
- *Institute of Navigation GPS 2002, Portland, OR*, September 26, 2002. Presented "Signal-in-Space User Range Error Assessment via Combined Space and Ground-based Measurement Data", and published paper in conference proceedings.
- *Institute of Navigation National Technical Meeting, Anaheim, California*, January 2000. Presented (with P. Tran and J. Angus) "Sensitivity of CAT I Precision Approach Availability to Ionospheric Monitoring". Paper published in conference proceedings.
- *Institute of Navigation National Technical Meeting, San Diego, California*, January 2004. Supported presentation (with R. DiEsposti, J. A. DiLellio, C. Kelley, A. Dorsey, H. Fliegel, J. Berg, C. Edgar, T. McKendree, and P. Shome), "The Proposed State Vector Representation of Broadcast Navigation Message for User Equipment Implementation of GPS Satellite Ephemeris Propagation". Paper published in conference proceedings.

- *Institute of Navigation National Technical Meeting, Anaheim, California*, January 2003. Supported presentation (with R. DiEsposti, J. DiLellio, D. Galvin, C. Kelley, J. Shih, "GPS III URA and URRA Information for Optimal User Performance". Paper published in conference proceedings.
- *Mechanics of Materials Conference, San Diego, California*, June 2001. Presented (with W. E. Olmstead) "Numerical Solution of Shear Localization in Johnson-Cook Materials". Extended abstract published in conference proceedings.
- *The International Association of Institutes of Navigation World Congress, San Diego, California*, June 2000. Presented (with P. Tran) "Impacts of GEOs as Ranging Sources on Precision Approach Category I Availability", and published paper in conference proceedings.
- *The 12th Engineering Mechanics Conference, La Jolla, California*, May 1998. Presented (with W. E. Olmstead) "Numerical Simulations of Shear Localization", and published a paper in conference proceedings.
- *The Fourteenth U. S. Army Symposium on Solid Mechanics*, Myrtle Beach, South Carolina, October 1996. Supported presentation (with W. E. Olmstead) "The Evolution of Shear Band Width". Paper published in conference proceedings.

UNIVERSITY AND COMMUNITY SERVICE

- Tustin Legacy Magnet Academy. Guest speaker on careers (2021). PTO treasurer (2021-present)
- MS in Business Analytics Committee (2021-present)
- Tenure process and standards task force (2021)
- Graziadio Faculty Council (2017-2023). Vice-chair 2019-20. Chair 2020-21, 21-22.
- Faculty annual evaluation and tenure alignment task force (2019)
- Doctorate in Business Administration (DBA) committee (2017)
- Pepperdine University – Faculty steering committee for new technology (2017-present)
- Committee member – Bachelor of Science in Management Program (2011-14, 2023-present), Co-chaired in CY 2016-17.
- Committee member – Fully employed MBA program admissions (AY 2010-2011, 2014 – 2016)
- Good Shepherd Lutheran Church, Irvine. Backup drummer for contemporary services. Supported consolidation of the church to a single site, including guidance on strategic planning and operations. (2010-2011)
- Ladera Elementary, Tustin. PTO Treasurer (AY 2011-2013, AY2015-2019), PTO Financial Secretary (AY 2013-2015)
- Launched the 1st Analytics seminar at Pepperdine's Irvine Graduate Campus to assist new fully employed MBA students in reviewing their undergraduate business math, probability, and statistics (May 2010).
- Regular guest speaker, Fully-Employed MBA information session, Pepperdine University
- Sakai® focus group member (March 2010) – participated in Sakai pilot program to evaluate its merits as a new learning management system, and replacing Blackboard as the default Pepperdine university-wide system.
- Ladera Elementary School Principal for the Day – March 18th, 2010. Ladera Elementary Art Masters volunteer.
- Regular donation of O+ blood to the American Red Cross, 1997 – present.
- Big Brothers and Big Sisters of Orange County – Big Brother Program, 2004-2005.
- Big Brothers and Big Sisters of Orange County – Big Couples Program, 2002-2003.
- Irvine Community Police Academy, June 2003. Career Day, Vista Verde Elementary School, May 2001.

INDUSTRY CONSULTING

- Covisum LLC. Consulted on fat-tailed return distributions and diversification benefits, 2021.
- Commonwealth Casualty Company. Consulted on forecasting economic indicators, 2021.
- Pacific Gas and Electric. Conducted seminar on real options, 2019.
- Direxion® Investments. Consulted on fractionally leveraged ETFs, 2017 – 2019.

SELECTED MEDIA QUOTES

- Delaying Taxes in Retirement Isn't Always Best, Award-Winning Paper Shows (2022). ThinkAdvisor.
- Why is post-retirement planning more complex than you expected? (2021). Forbes.
- "How to Invest Money – What the Experts say. (2020) Is Using a robo advisor a reliable way to save for retirement?".

- Watch now: A 'Deep Dive on Retirement Drawdown Strategies', Retirement Income Journal. (2021)

INDUSTRY EXPERIENCE

October 2008 **Thales-Raytheon Systems** Fullerton, California
- January 2010 Department Manager Network Centric Systems

- *System Engineering Functional Manager* – Managed over 70 system engineers, including front-line managers, to provide development, integration, test, and delivery of multiple military, civil and commercial programs. Approved bids for new programs from systems engineering departments, and supported improvements to internal business processes. Instrumental in the award of $82M award for an air traffic navigation system for India.

July 2001 **The Boeing Company** Seal Beach/Huntington Beach, California
- October 2008 Sr. Manager, Navigation Systems Space and Intelligence Systems

- *Chief Engineer* – Developed proposal, including design and budgetary aspects that encapsulated block upgrade program for GPS III space system. Identified new technology development plans while integrating cost, risk, and accelerated capability issues.
- *Proposal lead* – Led the development of a $300M capability insertion program as part of a large $2B+ GPS III proposal to the US Air Force.
- *Lead system engineer* - Led team of 20+ systems engineers to support enterprise-level iGPS maturation, including technical, financial, and risk assessment to satisfy emerging military mission needs and create a value-added offering. Supported executive acquisition assessment, due diligence, patent portfolio reviews, market assessments, independent peer reviews, operations development, and executive-level sponsored initiatives.
- *Modeling and simulation R&D Principal* - Created a User Range Error simulation employing 250+ state Kalman Filter to improve orbit and clock estimation algorithms using proposed observation data in the GPS III system.

August 1999 **Raytheon Company** Fullerton, California
- July 2001 Senior Systems Engineer II WAAS Program

- Led the development of a real-time service monitoring system. Conducted marketing demonstrations to Japanese civil aviation in Taipei, and the FAA in Washington, D.C.
- Supported architectural enhancements and conducted trade studies to integrate and optimize system design and support system test and checkout.

July 1997 **The Aerospace Corporation** El Segundo, California
- August 1999 Member of the Technical Staff Satellite Navigation Department

- Produced a Monte Carlo simulation of a search-and-rescue satellite system to demonstrate the effect of oscillator uncertainty on geo-location accuracy. Conducted performance analysis of GPS payload subsystem.

June 1990 **The Timken Company** Canton, Ohio
- June 1992 Intern Mechanical/Tribochemical Sciences Department

- Optimized cooling system using thermal stress analysis of company's continuous steel caster using multi-factor models for statistical analysis.

CORPORATE MANAGEMENT TRAINING

Earned Value Certification (2009); Critical Chain Project Management (2007); Lean 101 (2007); Leading from the Middle (2005, 2nd generation – 2007); Managing within the Law (2005); Leadership Essentials (2005); Leadership Excellence (2005, 2006, 2007)

PROFESSIONAL AFFILIATIONS

Decision Sciences Institute (DSI), Academy of Financial Services(AFS), Beta Gamma Sigma (BGS)
Institute of Navigation (ION), American Institute of Aeronautics and Astronautics (AIAA)
Society of Industrial and Applied Mathematics (SIAM), Academy of Economics and Finance (AEF).

AWARDS

- Best Paper Award. 6th Annual Academic Research Colloquium sponsered by the Certified Financial Planners Board. (2022)

- Best Paper Award in Financial Planning – Sponsored by CFP® board of standards, The Academy of Financial Services Annual Meeting (2018)
- Julian Virtue Professorship, Pepperdine Graziadio Business School (2018-2020)
- Best Paper Award in Retirement Income Planning – Sponsored by the American College of Financial Services®, The Academy of Financial Services Annual Meeting (2015).
- Rothschild Applied Research Fellowship, Pepperdine University. (November 2015).
- Julian Virtue Professorship, Pepperdine University Graziadio School of Business and Management (2014-16)
- Team Achievement Award, Raytheon - Network Centric Systems. (November 2009). Member of successful capture team for a competitive $82M upgrade to air traffic navigation system in India.
- Walter P. Murphy Fellowship (1993-1994) – Northwestern University
- Society of Industrial and Applied Mathematics (SIAM) Student Paper Competition (1993) – Honorable Mention