

Curriculum Vitae

Myles D. Garvey, Ph.D

98 Fencsak Avenue, Elmwood Park, NJ, 07407

Neurodivergent - Adult AuDHD/High Functioning Autism

Mobile: (201) 838-3842

Citizenship: USA

Academic Employment and Affiliations

Northeastern University

September 2021 - September 2023: Co-Director of Digital, Analytics, Technology and Automation (DATA) Initiative Research Lab at Northeastern University

September 2020 - September 2023: Assistant Teaching Professor, Marketing Group

William Paterson University

September 2018 - June 2020: Assistant Professor of Management Analytics

Rutgers Business School (Newark + New Brunswick)

-Instructor in Supply Chain Management and Marketing Science, September 2016 - August 2017

-Adjunct Professor of MBA, MS, and BS in Marketing, Information Systems, and Operations (2013 - 2019)

Rutgers School of Business (Camden)

Adjunct Professor of Statistics (2015)

Montclair State University

Adjunct Professor of Statistics - 2015 - 2016

Fairleigh Dickinson University

Adjunct Professor of Marketing (2014 - 2016)

New Jersey City University

Adjunct Professor of Marketing (2013)

Areas of Expertise

- Traditional forms of Data Analysis such as Econometrics, Time Series Analysis, Bayesian Statistics, and Machine Learning.
- Non-traditional forms of Data Analysis such as Network Analytics, Natural Language Generation, Processing, and Understanding, Facial Data, and Data Visualization from a technical and physiological, and psychological standpoint.
- Researching and analyzing trends in social, political, and economic contexts using thorough academic literature reviews fused with big data techniques.
- Supply Chain Management and Disruption Risk Analysis, Marketing Science, Marketing and Social Media Analytics, Business and Management Analytics, Data Science, Logistics, Operations Research, and Management Science
- Mathematical Optimization and General Model Development
 - Machine Learning, Data Analysis, Econometrics, Bayesian Statistics, Artificial Intelligence
- Software Engineering, Computer Programming and Algorithm Development (R, Python, Java/J2EE/Various Frameworks, see further below for a complete list of programming ability)

Education

Ph.D., Supply Chain Management and Marketing Science, 2018
 Rutgers Business School
 Rutgers University, Newark and New Brunswick, NJ

Coursework in the Ph.D. Program of Mathematics, 2010-2011.
 College of Science and Technology
 Temple University, Philadelphia, PA

Two Separate Degrees:

B.S., Mathematics, 2010, Cum Laude
B.S., Computer Science, 2010, Cum Laude
 College of Arts and Science
 University of Hartford, West Hartford, CT

Research

Primary Research Interests

Artificial Intelligence, Large Language Models, Neural Networks, Riemann Zeta Function, Neural Network Calculus, Data Science, Philosophy of Science, Supply Chain Analytics, Social Media and Marketing Analytics, Sustainable System Design, Optimization, and Analysis, Supply Chain Risk Propagation, Analytical Methods for Business Analytics/Data Science.

Methodological Toolbox

Social Network Analysis, Econometric modeling and estimation, Frequentist and Bayesian Statistics, Probability Theory and Bayesian Networks, Machine Learning and Data Mining, Textual Analytics, Artificial Intelligence, Methods of Operations Research, Game Theory, Linear/Non-Linear/Stochastic Optimization, Network Theory and Analysis, Stochastic Processes, Simulation Design, Managerial Frameworks and Theory, Mathematics (Calculus, Statistics, Topology, etc), Computer Programming (Java, R, Python, etc), Programming APIs (Twitter, Merian-Webster, Facebook, etc), and Amazon Web Services with other Cloud Technologies.

Peer-Reviewed Journal Publications

Zadeh, A. A., Peng, Y., Puffer, S. M., & Garvey, M. D. (2022). *Sustainable Sand Substitutes in the Construction Industry in the United States and Canada: Assessing Stakeholder Awareness*. *Sustainability*, 14(13), 7674.

Garvey, M. D., Samuel, J., & Pelaez, A. (2021). *Would you please like my tweet?! an artificially intelligent, generative probabilistic, and econometric based system design for popularity-driven tweet content generation*. *Decision Support Systems*, 144, 113497.

Garvey, M. D., & Carnovale, S. (2020). *The rippled newsvendor: A new inventory framework for modelling supply chain risk severity in the presence of risk propagation*. *International Journal of Production Economics*, 107752.

Garvey, M. D., Carnovale, S., & Yeniyurt, S. (2015). *An analytical framework for supply network risk propagation: A Bayesian network approach*. *European Journal of Operational Research*, 243(2), 618-627.

Book Chapters

Carnovale, S., and Garvey, M. (2021) “Playing to Win: Applying Game Theory to Purchasing and Supply Management” in *A Handbook of Theories for Purchasing, Supply Chain, and Management Research* (ISBN TBD), co-edited by: Wendy Tate, Lisa Ellram, and Lydia Bals.

Garvey, M. (2021) “A Philosophical Examination on the Definition of Cyberspace” in *Cyber Security and Supply Chain Management: Risks, Challenges, and Solutions*, co-edited by: Steven Carnovale and Sengun Yeniyurt

Garvey, M., Samuel, J., Kretinin, A. (2021) “An Ontology of Supply Chain Cybersecurity” in *Cyber Security and Supply Chain Management: Risks, Challenges, and Solutions*, co-edited by: Steven Carnovale and Sengun Yeniyurt

Conner, C., Samuel, J., Garvey, M., Samuel, Y., and Kretinin, A., (2020) *Conceptual Frameworks for Big-Data Visualization: Discussion on Models, Methods and Artificial Intelligence for Graphical Representations of Data*. *Handbook of Research for Big Data: Concepts and Techniques*, Apple Academic Press, USA

Manuscripts Under Near Submission

Garvey, M.D., Carnovale, S. *Using Text-Data to Design Language Models in Business Research: A Framework for Constructing and Measuring the Validity and Reliability of Social Science Constructs in Supply Chain Management and Macroeconomics*.

Phase: Data Wrangling and Theory Design

Planned Submission: to *Management Science* on April 1st, 2023

Garvey, M.D., Carnovale, S. *An Empirically Derived Supply Chain Network Structure Taxonomy*

Phase: Final Manuscript Formatting Editing

Submitting to *Journal of Supply Chain Management* on May 1st, 2023

Scholarly Work Under Preparation

Puffer, S.M., Zadeh, A.A., Peng, Y., Garvey, M.D. *A Multi-Methods Natural Language Analytics Approach to Characterizing the Adoption of Sand Substitutes in the Construction Industry* Phase:

Data Wrangling, Analysis, and Interpretation

Target Journal: Journal of Cleaner Production

Anticipated Date of Submission: March, 2023

Garvey, M.D., Kretinin, A. *Supply Chain Structure and Family Firm Internationalization: Multi-Level Network Analysis*

Phase: Data Gathering

Target Journal: Journal of International Business Studies

Anticipated Date of Submission: June, 2023

Garvey, M.D., Kelly, Shannon. *A Historical Natural Language Analysis of Political Parties and Caucuses in the House of Representatives in the United States from 1790 - 2022*. Phase:

Gathering Field Data, Designing Language Model

Target Journal: Journal of Political Economy

Other Publications

Samuel, J., Garvey, M.D., Kashyap, R. *That Message Went Viral?! Exploratory Analytics into the Propagation of Tweets*. NEDSI 2019 Proceedings, Pages 244-249.

Public Media Appearances

Wallethub - "Ask the Experts" on 2022 State Farm Insurance Review

(<https://wallethub.com/edu/ci/state-farm-car-insurance-review/62595>)

Dissertation

Garvey M.D. *The Effects of Network Structure of Supply Chain Propagation Risk: A Simulation Study*.

Committee Chair: Sengun Yeniyurt

Committee: Sengun Yeniyurt, Michael Katehakis, Steven Carnovale, and Rudolf Leushner

Proposed: April 26, 2018

Defense: August 9th, 2018

Conference Presentations

Garvey, M.D., Carnovale, S. *A Supply-Chain Risk Propagation-Averse Inventory Model*. 2019 Decision Sciences Annual Conference (New Orleans, LA, Nov 23 – 25, 2019)

Garvey, M.D., Samuel, J. *Estimation of Distribution Algorithms and the Bayesian Optimization Algorithm in Operations Research: A Modified Approach to Solving Problems in Operations Research*.

2019 Decision Sciences Annual Conference (New Orleans, LA, Nov 23 – 25, 2019)

Garvey, Myles D. *The Disruptive Newsvendor*. 2019 POMS Annual Conference (Washington D.C., May 3 - May 6th, 2019)

Garvey, Myles D. *Network Structure and Supply Chain Risk Propagation: A Theoretical Framework*
2019 POMS Annual Conference (Washington D.C., May 3 - May 6th, 2019)

Samuel, Jim, Garvey, Myles D., and Kashyap, Rajiv. *The Bayesian Optimization Algorithm: Why OR Should Adopt It!* 2019 POMS Annual Conference (Washington D.C., May 3 - May 6th, 2019)

Samuel, Jim, Garvey, Myles D., and Kashyap, Rajiv. *That Message Went Viral?! Exploratory Analytics and Sentiment Analysis into the Propagation of Tweets*. 2019 NEDSI Annual Conference (Philadelphia, PA, April 4 - 6, 2019)

Garvey, Myles D., Carnovale, S., *A Stochastic Facility Location Problem with Supply Chain Risk Propagation*, 2014 INFORMS Annual Conference, (San Francisco, CA, November 9-12, 2014).

Garvey, M.D., Carnovale, S., and S. Yeniyurt, *A Supply Chain Risk Management Framework: A Bayesian Network Approach*, Decision Sciences Institute Annual Meeting (Baltimore, MD November 16-19, 2013)

Garvey, M.D., Carnovale, S., and S. Yeniyurt, *A Supply Chain Risk Management Framework: A Bayesian Network Approach*, INFORMS Annual Meeting (Minneapolis, MN, October 6-9, 2013)

Garvey, M.D., Carnovale, S., and Yeniyurt, S. *Measuring Risk in Supply Chain Networks: An Analytical Perspective*, POMS Annual Conference (Denver, CO, May 3-6, 2013)

Carnovale, S., Garvey, M.D., and S. Yeniyurt, *The Management of Risk in Supply Chains: A Network Approach*, Decision Sciences Institute Annual Meeting (San Francisco, CA, November 17-20, 2012)

Carnovale, S., Garvey, M.D., and S. Yeniyurt, *The Management of Risk in Supply Chains: A Network Approach*, INFORMS Annual Meeting (Phoenix, AZ, October 14-17, 2012)

Carnovale, S., Garvey, Myles D., and Sengun Yeniyurt, *The Implications of Network Structure on Supply Chain Risk Management*, 22nd Annual North American Research Symposium on Purchasing and Supply Chain Management (Phoenix, AZ, March 15-16)

Garvey, Myles D., Carnovale, S. and Sengun Yeniyurt, *An Analytical Framework of Supply Chain Complexity: A Graph Theoretic Approach*, 2011 INFORMS Annual Conference, (Charlotte, NC, November 13-16, 2011).

Garvey, Myles D. *Functions Between the Line and Plane*, 2010 University of Hartford Undergraduate Research and Creativity Colloquium (West Hartford, CT, April 22, 2010).

de Lanerolle, Trishan R., Morelli, Ralph, Russell, Ingrid, Thayer, Sarah, Foecking, Rachel, Garvey, Myles. *App-Trac: A Free and Open Source Student Tracking Application*, Poster Contest, 2009 CCSCNE, (Plattsburgh, NY, April 24-25, 2009).

de Lanerolle, Trishan R., Morelli, Ralph, Russell, Ingrid, Thayer, Sarah, Foecking, Rachel, Garvey, Myles. *Engaging Students in the Free Open Source Movement Through Civic Engagement*, 2008 Grace Hopper Celebration of Women in Computing, (Keystone, CO, October 1-4, 2008).

Garvey, Myles, Padilla, Chris. *Relational Learning for Web Document Classification*, 2008 University of Hartford Undergraduate Research and Creativity Colloquium (West Hartford, CT, April 17, 2008)

Garvey, Myles, Padilla, Chris. *Relational Learning for Web Document Classification*, Poster Contest, 2008 CCSCNE (Staten Island, NY, April 11-12, 2008)

Research Service

Editorial Review Board Member:

Journal of Purchasing and Supply Management (2022 - Present)

Ad-Hoc Reviewer:

Informa: Transactions on Education (2022 - Present)

Journal of Business Research (2022 - Present)

Omega (2021 - Present)

RAIRO - Operations Research (2020 - Present)

International Journal of Production Research (2019 - Present)

International Journal of Production Economics (2019 - Present)

Annals of Operations Research (2019 – Present)

Journal of Purchasing and Supply Management (2019 - Present)

Supply Chain Management: An International Journal (2019-Present)

Supply Chain Forum: An International Journal (2019-Present)

Reliability Engineering and Systems Safety (2018)

Naval Research Logistics (2015)

European Journal of Operational Research (2014 - Present)

Conference Session Chair:

Chair, Manufacturing and Production Management: Analytical Advances in Manufacturing and Production. *Decision Science Institute Annual Conference*, New Orleans, LA, Nov 23 – Nov 25, 2019.

Teaching

Teaching Interests

Marketing, Marketing Science, Game Theory, Legal and Illegal Cannabis Markets and Behavior, Marketing Analytics, Social Media Marketing, Business Analytics, Machine Learning and Artificial Intelligence, Python, R, Data Science with Business Applications, Business Intelligence for Supply Chain and Marketing, Statistics, Probability, Algebra, Calculus, Supply Chain Analytics and Modeling, Supply Chain Management, Operations Management, Business Logistics and Transportation, Demand Planning and Fulfillment, New Product Planning, Introduction to Six Sigma and Lean Manufacturing, Service Management, Supply Security and Risk Management, Retail Marketing, Operations Management, Any other Mathematics Courses, Any Computer Science Courses.

Teaching Experience (Past, Current, and Scheduled)*:

* Most evaluations are available by request.

Northeastern University

DATA Initiative Research Lab

Spring 2022, Fall 2022

Business Applications for Natural Language Analytics

Spring 2022

APIs for Informed Business Decision Making

Fall 2020

Quantitative Analysis of Consumer Data

Spring 2022, Fall 2022

Marketing Analytics

Spring 2021, Summer 2021

Business Practicum for Python

Fall 2020, Spring 2021

Information Visuals and Dashboards for Business

Spring 2021, Spring 2022, Spring 2023

William Paterson University

(BAN – Business Analytics Course, M.S. – Master of Science Course)

M.S. BAN Modeling and Simulation for Business Decisions Summer 2020

M.S. BAN Economic Models

Summer 2019

M.S. BAN Calculus for Business Analytics

Summer 2019, Summer 2020

M.S. BAN Statistics for Business Analytics

Summer 2019, Fall 2019, Summer 2020

M.S. BAN Artificial Intelligence for Business

Fall 2019

M.S. BAN Data Warehousing and Data Mining

Winter 2020

M.S. BAN Machine Learning

Spring 2020

M.S. BAN Capstone

Spring 2020

M.S. BAN Business Analytics for Decision Making

Fall 2018
Management Information Systems
-Spring 2019 Section 1
-Spring 2019 Section 2
-Fall 2018 Section 1
-Fall 2018 Section 2
Supply Chain Management
-Spring 2019
-Fall 2018
Production and Operations Management
-Fall 2019
-Spring 2019

Rutgers Business School, Newark and New Brunswick

Introduction to Business Research Methods:
Spring 2018, Fall 2017, Spring 2017,
Spring 2016, Fall 2015, Spring 2015,
Fall 2014
Demand Planning and Fulfillment:
Fall 2016, Winter 2015, Summer 2015
MBA Data Analysis and Decision Making
Summer 2016
MBA Operations Analysis
Summer 2014
MBA B2B Marketing
Fall 2013
Introduction to Marketing
Summer 2013, Summer 2013, Winter 2019

Rutgers School of Business, Camden

Applied Business Statistics
Fall 2015

Fairleigh Dickinson University

Marketing Research:
Fall 2016, Fall 2015, Summer 2015, Spring 2015

Montclair State University

Introduction to Statistics:
Fall 2016, Summer 2015

New Jersey City University

Marketing Research:

Fall 2013 (Hybrid)

Academic Service

Northeastern University

-Co-Director of Digital, Analytics, Technology, and Automation (DATA) Initiative Research Lab (2021 - Present)

-Student mentoring for Research Practicum Marketing (2021 - Present)

-Representative for DATA at Northeastern's SOURCE (October, 2021)

William Paterson University Committees Served

- Department Curriculum Development Committee (2019 – 2020)

- University Research Council (2019 - 2020)

- Search Committee for Assistant Professor in Management Analytics (2019 - 2020)

Undergraduate Student Advising

Semesters: Fall 2018, Spring 2019, Summer 2019, Fall 2019, Spring 2020

Students advised: 90

Department Advised Within: Marketing and Management Science

Master of Science Graduate Student Advising

Semesters: Summer 2019, Fall 2019, Spring 2020

Students advised: 37

Department Advised Within: Marketing and Management Science

I am the only M.S. advisor in the Department, whom currently helps graduate students plot their path, as well as recruit new students for the following year's cohort.

Other Service

-Served as the representative for the Department of Marketing and Management Science of the Cotsakos College of Business Advisory and Advancement Board.

-Representative for Marketing and Management Science Department, Academic Fair, Fall 2018 William Paterson Open House, November 17th, 2018

-Accepted Students Day, Spring 2019, William Paterson, April 27th, 2019

University Events, Webinars, Workshops, and Non-Conference Presentations

-Guest Lecturer, “Can a computer interpret and suggest “tweet essence”?”, *Artificially Intelligent Twitter Analytics for COVID-19*, University of Charleston, WV, Zoom, April 23rd, 2020.

-Host and Lecturer of *Applied Business Analytics Workshop and Webinar Series*, William Paterson University, Zoom, April 21st and April 23rd, 2020.

-Lecturer “Methods in Neural Networks, Structured vs. Unstructured Learning, Bayesian Network Analysis, Latent Dirichlet Allocation, and other ML Theory”, *Machine Learning Workshop*, William Paterson University, May 20th - 27th, 2019

-Presenter: *That Message Went Viral?! Exploratory Analytics and Sentiment Analysis of the Propagation of Popular Tweets*, William Paterson University Explorations Research, Scholarship, and Creative Expression, April 18th, 2019.

-Presenter: *Supply Chain Risk Propagation: An Exploratory Simulation Into the Impact of Canonical Supply Network Structure*, William Paterson University Explorations Research, Scholarship, and Creative Expression, April 18th, 2019.

-Guest Lecturer for GGPlot 2 and R, “Mastering Data Visualization with Tableau, R and GGPlot2”, *Interactive and Introductory Business Analytics Workshop in Mastering Data Visualization with Tableau, R, R-Studio and GGPlot2*, William Paterson University, November 20th, 2018

Doctoral Coursework

Supply Chain Management and Marketing Science (Rutgers Business School)

Supply Chain Marketing Interfaces

Inventory Management

Supply Chain Models and Algorithms

Stochastic Methods in Supply Chain Management
Fundamentals of Optimizations for Supply Chain Management and Marketing Science
Econometrics
Advanced Econometrics
Statistical Linear Models
Stochastic Processes
Social Science Research Methods
Marketing Models (Choice Models)
Consumer Behavior
Game Theory
Application of Machine Learning to Big Data

Mathematics (Temple University)

Real Analysis I & II
Abstract Algebra I & II
Numerical Linear Algebra
Graph Theory
Complex Analysis I

Industry Experience

Outlier - Artificial Intelligence Trainer (March 2024 - Present)

I work on the cutting edge of artificial intelligence projects. Through the outlier platform, I am able to work on a variety of client projects who need human data validators. It essentially is the same functionality as training humans, but with a specialized twist towards understanding basic AI Bot and Large Language Model nuances.

Various Consulting Projects (August 2012 – Present)

Title: Analytics Consultant

Have worked in varying capacities for short-term contracts and projects ranging from software developer, engineer, business analyst, data scientist, and operations. Mainly employing my skills of

strategic use and implementation of analytics and data science in the financial, healthcare, and marketing industries.

Red Hat (October 2011- August 2012)

Title: Middleware Consultant

Responsibilities: Designing Proof of Concepts, JVM Fine Tuning, Securing Web Applications, Migrations of Web Application from Competitor Application Servers to the JBoss AS, Reverse engineering software, new software development, enterprise service bus software development, technical interviewer and mentored newer consultants in J2EE and the various JBoss Products.

Advanced Technical Support (October 2007- August 2010)

Title: Programming Intern

Responsibilities: Server administration, Basic IT tasks such as conducting backups and repairs, installing and maintaining virtual machines and programming SQL Reports for various different software.

Awards

Outstanding Reviewer Award for the Journal of Purchasing and Supply Management (2021)

William Paterson Business Practice and Policy Research Forum Grant (2019, 2020) Rutgers

Center in Research for Regulated Industries Fellowship (2013-2016) Rutgers Business

School Dean's Research Award (2013)

Temple University Teaching Assistantship (2010-2011)

Dean's List (2006 Fall, 2007 Spring, 2008 Fall & Spring, 2009 Fall)

University of Hartford Mathematics Book Award (2010)

University of Hartford Fall President's Honors (2009)

University of Hartford Mathematics Junior Award (2009)

Sabionski Scholarship for University of Hartford (2007, 2008, 2009)