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<b>Professor and Chair</b>	Business Systems & Analytics Department La Salle University, Philadelphia, Pennsylvania 19141, United States
<b>Honorary Professor</b>	Business Information Systems Department University of Paderborn, D-33098 Paderborn, Germany
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**EMPLOYMENT**

**LA SALLE UNIVERSITY, Philadelphia, Pennsylvania, USA**

School of Business, [Business Systems and Analytics Department](#) (1984 to Present)

Full Professor with Tenure (Tenured in 1990)

Chairman, Business Systems and Analytics Department (2015 to Present)

Distinguished Chair of Business Analytics (2014 to Present)

Professor, Business Systems and Analytics (2004 to Present)

Chairman, Management Department (1993-05)

Executive Director, E-commerce Institute (January 2003-05)

Associate Professor, Management Information Systems and Decision Sciences (1996-04)

Director, Center for Technology and Management (1987-93)

Assistant Professor, Management Information Systems and Decision Sciences (1986-96)

Instructor, Management Information Systems and Decision Sciences (1984-86)

*Major Committees:* Tenure and Promotion Appeals Committee (2005-08); Tenure and Promotion Appeals Committee (1999-02); Tenure and Promotion Committee (1994-98)

*Course Evaluations:* [Summary report](#)

**UNIVERSITY OF PADERBORN, Paderborn, Germany**

Faculty of Business Administration and Economics

[Management Information Systems and Operations Research Department](#)

[Honorary Professor](#) (May 2016 to Present)

Email: [mtavana@mail.uni-paderborn.de](mailto:mtavana@mail.uni-paderborn.de)

Distinguished Guest Professor (May 2015-May 2016)

Guest Professor (May 2008-May 2015)

*Course Evaluations:* [Summary report](#)

**RUTGERS UNIVERSITY, New Brunswick-Newark-Camden, New Jersey, USA**

Rutgers School of Business (2008 to Present)

Adjunct Professor

Management Science and Information Systems Department (New Brunswick and Newark Campuses)

Management Department (Camden Campus)

*Course Evaluations:* [Summary report](#)

## EDUCATION

### UNIVERSITY OF PENNSYLVANIA, Philadelphia, Pennsylvania

The Wharton School, Doctoral Programs (January -December 1997)

Post-Doctoral Diploma (P.Ph.D.) (Habilitation)

*Thesis Title:* Euclid: Strategic Alternative Assessment Matrix

*Thesis Supervisor:* Dr. Harbir Singh

### AMERICAN UNIVERSITY IN LONDON, London, England

College of Business Administration, Doctoral Programs (December 1991-March 1993)

Doctor of Philosophy (Ph.D.)

*Major:* Management Information Systems

*Thesis Title:* Strategic Assessment Model: A Multiple Criteria Decision Support System

*Thesis Supervisor:* Dr. Snehamay Banerjee, Management Department, Drexel University

*Thesis Committee:* Dr. Edward Lusk, Wharton School, University of Pennsylvania; Dr. Oliver Heil, Anderson Graduate School of Management, UCLA; Dr. Kristiaan Helsen, Graduate School of Business, University of Chicago; Dr. Ronald Gulezian, Quantitative Methods Department, Drexel University; and Dr. Lakhbir Hayre, Financial Strategies Group, Prudential Securities.

### DREXEL UNIVERSITY, Philadelphia, Pennsylvania

College of Information Studies (January 1987-June 1991)

Post-Master of Information Systems (P.M.I.S.)

*Major:* Information Systems Design and Evaluation

*Advisor:* Dr. Gary Strong

### UNIVERSITY OF PENNSYLVANIA, Philadelphia, Pennsylvania

The Wharton School, Doctoral Programs (September 1981-May 1987)

Ph.D. Candidate (A.B.D.)

*Major:* Systems Sciences

*Advisors:* Dr. Russell Ackoff and Dr. Edward J. Lusk

### LA SALLE UNIVERSITY, Philadelphia, Pennsylvania

School of Business Administration, Graduate Programs (September 1979-May 1981)

Master of Business Administration (M.B.A.)

*Majors:* Management Information Systems and Management Science/Operations Research

### TEHRAN BUSINESS COLLEGE, Tehran, Iran

School of Management, Management Science Program (September 1975-August 1978)

Bachelor of Science (B.S.)

*Majors:* Management Science and Management Information Systems

*Awards:* Four Years National Merit Scholarship

## CONTINUING EDUCATION

### LA SALLE UNIVERSITY, Philadelphia, Pennsylvania

College of Professional and Continuing Studies (January 2009)

Certificate of Online Learning and Teaching

### UNIVERSITY OF CALIFORNIA, LOS ANGELES (UCLA), Los Angeles, California

Anderson Graduate School of Management (January-June 1995)

Visiting Scholar, Decision Support Systems (Multi-criteria Decision Support Models in Supply Chain Management)

*Research Supervisor:* Dr. Oliver Heil

**RESEARCH FELLOWSHIPS**

**NAVAL RESEARCH LABORATORY, Stennis Space Center, Mississippi**

Geospatial Innovation Lab (May-August 2015)

Distinguished Research Fellow

*Fellowship Project:* Design and development of interactive decision support systems for Managing Uncertain Spatial Data in Geographic Information Systems.

United States Naval Research Laboratory (Grant Number: N000141310505)

**AIR FORCE RESEARCH LABORATORY, Rome, New York**

Information Directorate - Information Systems Research Branch (May-July 2013)

Distinguished Research Fellow

*Fellowship Project:* Risk Analysis Model for Assessing Availability and Integrity in Command and Control Systems

United States Air Force Research Laboratory (Grant Number: FA8750-13-2-0115)

**AIR FORCE RESEARCH LABORATORY, Rome, New York**

Information Directorate - Information Systems Research Branch (May-July 2012)

Distinguished Research Fellow

*Fellowship Project:* Robustness and Resiliency Assessment in Integrated Command and Control Systems

United States Air Force Research Laboratory (Grant Number: FA8750-11-2-0218)

**AIR FORCE RESEARCH LABORATORY, Rome, New York**

Information Directorate - Information Systems Research Branch (May-July 2011)

Distinguished Research Fellow

*Fellowship Project:* Workforce Planning and Business Process Reengineering

United States Air Force Research Laboratory (Grant Number: FA9550-09-C-0114)

**AIR FORCE RESEARCH LABORATORY, Rome, New York**

Information Directorate - Information Systems Research Branch (May-July 2010)

Distinguished Research Fellow

*Fellowship Project:* Dynamic Air Tasking Assessment in Network-Centric Battlespace

United States Air Force Research Laboratory (Grant Number: FA8750-09-2-0157)

**NAVAL RESEARCH LABORATORY, Stennis Space Center, Mississippi**

Marine Geosciences Division - Mapping, Charting and Geodesy Branch (May-July 2009)

Distinguished Research Fellow

- Fellowship Projects:*
1. Network-Centric Autonomous Underwater Vehicle Mission Planning
  2. Decision Support System for the NATO Enlargement Process

United States Naval Research Laboratory (Grant Number: N00173-08-P-6201)

**NAVAL RESEARCH LABORATORY, Stennis Space Center, Mississippi**

Marine Geosciences Division - Mapping, Charting and Geodesy Branch (May-July 2008)

Distinguished Research Fellow

- Fellowship Projects:*
1. Autonomous Underwater Vehicle Mission Planning and Control Systems
  2. Decision Support Systems for the Base Realignment and Closure (BRAC) Process

United States Naval Research Laboratory (Grant Number: N00014-08-1-0160)

**AIR FORCE RESEARCH LABORATORY, Rome, New York**

Information Directorate - Information Systems Research Branch (May-July 2007)

Distinguished Research Fellow

*Fellowship Project:* Network-Centric Simulation in Joint Air Operations

United States Air Force Research Laboratory (Grant Number: FA8750-07-2-0043)

**AIR FORCE RESEARCH LABORATORY, Rome, New York**

Information Directorate - Information Systems Research Branch (May-July 2006)

Distinguished Research Fellow

*Fellowship Project:* Network-Centric Multi-Criteria Modeling of Joint Air Operations

United States Air Force Research Laboratory (Grant Number: FA9550-04-C-0141)

**NASA – JOHNSON SPACE CENTER, Houston, Texas**

Mission Operations Directorate - Mission Control Center (May-July 2004)

Distinguished Research Fellow

*Fellowship Projects:*           1. Intelligent Decision Support Systems for Future Manned Spaceflight Operations  
  2. Benchmarking system for Global Warming in the European Union

National Aeronautics and Space Administration (Grant Number: NAG9-1526)

**NASA – JOHNSON SPACE CENTER, Houston, Texas**

Mission Operations Directorate - Mission Control Center (May-July 2003)

Distinguished Research Fellow

*Fellowship Projects:*           1. Integrated Spacecraft Command and Control Systems  
  2. Benchmarking System for Technology Assessment

National Aeronautics and Space Administration (Grant Number: NAG9-1526)

**NASA – JOHNSON SPACE CENTER, Houston, Texas**

Mission Operations Directorate - Mission Control Center (May-July 2000)

Distinguished Research Fellow

*Fellowship Project:*           Mission Operations Architecture Assessment for the Human Exploration of Mars

National Aeronautics and Space Administration (Grant Number: NAG9-39)

**NASA – JOHNSON SPACE CENTER, Houston, Texas**

Mission Operations Directorate - Mission Control Center (May-July 1999)

Distinguished Research Fellow

*Fellowship Project:*           Automated Flight Control System for the International Space Station

National Aeronautics and Space Administration (Grant Number: NAG9-931)

**NASA - KENNEDY SPACE CENTER, Cape Canaveral, Florida**

Shuttle Management and Operations Directorate - Shuttle Project Engineering Center (May-July 1996)

Distinguished Research Fellow

*Fellowship Project:*           Group Decision Support System for Space Shuttle Technology Assessment

National Aeronautics and Space Administration (Grant Number: NGT-60002)

**NASA - KENNEDY SPACE CENTER, Cape Canaveral, Florida**

Shuttle Management and Operations Directorate - Shuttle Project Engineering Center (May-July 1995)

Distinguished Research Fellow

*Fellowship Project:*           Advanced Technology Projects Prioritization for Shuttle Management and Operations

National Aeronautics and Space Administration (Grant Number: NGT-52605)

**VISITING PROFESSORSHIPS**

**ECOLE SUPERIEURE DE COMMERCE ET MANAGEMENT, Tours, Poitiers, La Rochelle, France**

School of Business and Management (2001 to Present)

Visiting Professor, Strategic Information Systems

**HANSUNG UNIVERSITY, Seoul, Korea**

Visiting Professor, Emerging Paradigms in Global Consulting (November 2008)

**UNIVERSIDAD DE LA SALLE PACHUCA, Pachuca, Mexico**

Visiting Professor, Cybernetics and Informatics (February 2008)

**UNIVERSIDAD DE LA SALLE CUERNAVACA, Cuernavaca, Mexico**

Visiting Professor, Information Technology (February 2008)

**BASEL BUSINESS COLLEGE, Basel, Switzerland**

Visiting Professor, Information Technology and Decision Making (May 2005)

**UNIVERSIDAD DE LAS AMÉRICAS, Puebla, Mexico**

Visiting Professor, Information Technology (April-May 2003)

**UNIVERSIDAD DE LAS AMÉRICAS, Puebla, Mexico**

Visiting Professor, Information Technology (May-June 2002)

**LVIV INSTITUTE OF MANAGEMENT, Lviv, Ukraine**

Visiting Professor, Decision Support Systems and Systems Analysis (July-August 1996)

## REFEREED SCHOLARLY JOURNAL PUBLICATIONS

### Accepted Manuscripts in Press

1. Tavana, M., Izadikhah, M., Toloo, M. and Roostaei, R. (Accepted Manuscript in Press) '[A New Range Directional Model for Data Envelopment Analysis Problems with Negative and Flexible Measures](#),' *Omega*.
2. Tavana, M., Shaabani, A., Mansouri Mohammadabadi, S. and Varzani, N. (Accepted Manuscript in Press) '[An Integrated Fuzzy AHP-Fuzzy MULTIMOORA Model for Supply Chain Risk-Benefit Assessment and Supplier Selection](#),' *International Journal of Systems Science: Operations and Logistics*.
3. Tavana, M., Nazari-Shirkouhi, S. and Farzaneh Kholghabad, H. (Accepted Manuscript in Press) 'An Integrated Quality and Resilience Engineering Framework in Healthcare with Z-number Data Envelopment Analysis,' *Health Care Management Science*.
4. Khanjani Shiraz, R., Tavana, M. and Fukuyama, H. (Accepted Manuscript in Press) '[A Joint Chance-Constrained Data Envelopment Analysis Model with Random Output Data](#),' *Operational Research: An International Journal*.
5. Ebrahimi, B., Tavana, M. and Charles, V. (Accepted Manuscript in Press) '[A Note and New Extensions on "Interval Efficiency Measures in Data Envelopment Analysis with Imprecise Data"](#),' *Operational Research: An International Journal*.
6. Kazemi, S., Tavana, M., Toloo, M. and Zenkevich, N.A. (Accepted Manuscript in Press) '[A Common Weights Model for Investigating Efficiency-Based Leadership in the Russian Banking Industry](#),' *RAIRO-Operations Research*.
7. Aslani, B., Rabiee, M. and Tavana, M. (Accepted Manuscript in Press) '[An Integrated Grey Based Multi-Criteria Decision Making Framework for Sustainable Supplier Selection](#),' *International Journal of Systems Science: Operations and Logistics*.
8. Pereira Soares, G., Luz Tortorella, G., Bouzon, M. and Tavana, M. (Accepted Manuscript in Press) 'A Fuzzy Maturity-Based Method for Lean Supply Chain Management Assessment,' *International Journal of Lean Six Sigma*.
9. Campos, E.A.R., Tavana, M., ten Caten, C.S., Bouzon, M. and Paula, I.C. (Accepted Manuscript in Press) '[A Grey-DEMATEL Approach for Analyzing Factors Critical to the Implementation of Reverse Logistics in the Pharmaceutical Care Process](#),' *Environmental Science and Pollution Research*.

### 2021

10. Tavana, M., Toloo, M., Aghayi, N. and Arabmaldar, A. (2021) '[A Robust Cross-Efficiency Data Envelopment Analysis Model with Undesirable Outputs](#),' *Expert Systems with Applications*, Vol. 167, Article 114117.
11. Tavana, M., Shaabani, A. and Valaei, N. (2021) '[An Integrated Fuzzy Framework for Analyzing Barriers to the Implementation of Continuous Improvement in Manufacturing](#),' *International Journal of Quality and Reliability Management*, Vol. 38, No. 1, pp. 116-146.
12. Tavana, M., Izadikhah, M., Farzipoor Saen, R. and Zare, R. (2021) '[An Integrated Data Envelopment Analysis and Life Cycle Assessment Method for Performance Measurement in Green Construction Management](#),' *Environmental Science and Pollution Research*, Vol. 28, No. 1, pp. 664-682.
13. Khalili Nasr, A., Tavana, M., Alavi, B. and Mina, H. (2021) '[A Novel Fuzzy Multi-Objective Circular Supplier Selection and Order Allocation Model for Sustainable Closed-Loop Supply Chains](#),' *Journal of Cleaner Production*, Vol. 287, Article 124994.

14. Alavi, B., Tavana, M. and Mina, H. (2021) '[A Dynamic Decision Support System for Sustainable Supplier Selection in Circular Economy](#),' *Sustainable Production and Consumption*, Vol. 27, pp. 905-920.
15. Rastegar, M., Tavana, M., Meraj, A. and Mina, H. (2021) '[An Inventory-Location Optimization Model for Equitable Influenza Vaccine Distribution in Developing Countries During the COVID-19 Pandemic](#),' *Vaccine*, Vol. 39, No. 3, pp. 495-504.
16. Gheisariha, E., Tavana, M., Jolai, F. and Rabiee, M. (2021) '[A Simulation-Optimization Model for Solving Flexible Flow Shop Scheduling Problems with Rework and Transportation](#),' *Mathematics and Computers in Simulation*, Vol. 180, pp. 152-177.

2020

17. Tavana, M., Khalili-Damghani, K., Santos Arteaga, F.J. and Hashemi, A. (2020) '[A Malmquist Productivity Index for Network Production Systems in the Energy Sector](#),' *Annals of Operations Research*, Vol. 284, pp. 415-445.
18. Tavana, M., Mousavi, S.M.H., Mina, H. and Salehian, F. (2020) '[A Dynamic Decision Support System for Evaluating Peer-to-Peer Rental Accommodations in the Sharing Economy](#),' *International Journal of Hospitality Management*, Vol. 91, Article 102653.
19. Tavana, M., Khosrojerdi, G., Mina, H. and Rahman, A. (2020) '[A New Dynamic Two-Stage Mathematical Programming Model under Uncertainty for Project Evaluation and Selection](#),' *Computers and Industrial Engineering*, Vol. 149, Article 106795.
20. Jafarian, A., Rabiee, M. and Tavana, M. (2020) '[A Novel Multi-Objective Co-Evolutionary Approach for Supply Chain Gap Analysis with Consideration of Uncertainties](#),' *International Journal of Production Economics*, Vol. 228, Article 107852.
21. Vafadarnikjoo, A., Tavana, M., Botelho, T. and Chalvatzis, K. (2020) '[A Neutrosophic Enhanced Best-Worst Method for Considering Decision-Makers' Confidence in the Best and Worst Criteria](#),' *Annals of Operations Research*, Vol. 289, pp. 391-418.
22. Farughi, H., Tavana, M., Mostafayi, S. and Santos Arteaga, F.J. (2020) '[A Novel Optimization Model for Designing Compact, Balanced, and Contiguous Healthcare Districts](#),' *Journal of the Operational Research Society*, Vol. 71, No. 11, pp. 1740-1759.
23. Kaviani, M.A., Tavana, M., Kumar, A., Michnik, J., Niknam, R. and Campos, E.A.R. (2020) '[An Integrated Framework for Evaluating the Barriers to Successful Implementation of Reverse Logistics in the Automotive Industry](#),' *Journal of Cleaner Production*, Vol. 272, Article 122714.
24. Yazdani, M., Tavana, M., Pamučar, D. and Chatterjee, P. (2020) '[A Rough Based Multi-Criteria Evaluation Method for Healthcare Waste Disposal Location Decisions](#),' *Computers and Industrial Engineering*, Vol. 143, Article 106394.
25. Santos-Arteaga, F.J., Tavana, M. and Di Caprio, D. (2020) '[A New Model for Evaluating Subjective Online Ratings with Uncertain Intervals](#),' *Expert Systems with Applications*, Vol. 139, Article 112850.
26. Ebrahimi, B., Tavana, M., Toloo, M. and Charles, V. (2020) '[A Novel Mixed Binary DEA Model for Ranking Decision-Making Units with Preference Information](#),' *Computers and Industrial Engineering*, Vol. 149, Article 106720.
27. Hashemi Petrudi, S.H., Tavana, M. and Abdi, M. (2020) '[A Comprehensive Framework for Analyzing Challenges in Humanitarian Supply Chain Management: A Case Study of the Iranian Red Crescent Society](#),' *International Journal of Disaster Risk Reduction*, Vol. 42, Article 101340.
28. Ebrahimi, B., Dellnitz, A., Kleine, A. and Tavana, M. (2020) '[A Novel Method for Solving Data Envelopment Analysis Problems with Weak Ordinal Data using Robust Measures](#),' *Expert Systems with Applications*, Vol. 164, Article 113835.
29. Khanjani Shiraz, R., Tavana, M. and Fukuyama, H. (2020) '[A Random-Fuzzy Portfolio Selection DEA Model using Value-at-risk and Conditional Value-at-risk Criteria](#),' *Soft Computing*, Vol. 24, 17167-17186.

30. Zaretalab, A., Hajipour, V. and Tavana, M. (2020) '[Redundancy Allocation Problem with Multi-State Component Systems and Reliable Supplier Selection](#),' *Reliability Engineering and System Safety*, Vol. 193, Article 106629.
  31. Jafari Songhori, M., Tavana, M. and Terano, T. (2020) '[Product Development Team Formation: Effects of Organizational- and Product-Related Factors](#),' *Computational and Mathematical Organization Theory*, Vol. 26, No. 1, pp. 88-122.
  32. Tavana, M., Amoozad Mahdiraji, H., Beheshti, M. and Abbasi Kamardi, A. (2020) '[Optimal Strategic Alliance in Multi-Echelon Supply Chains with Open Innovation](#),' *Managerial and Decision Economics*, Vol. 41, No. 7, pp. 1365-1384.
  33. Tavana, M., Hajipour, V. and Oveisi, S. (2020) '[IoT-based Enterprise Resource Planning: Challenges, Open Issues, Applications, Architecture, and Future Research Directions](#),' *Internet of Things*, Vol. 11, Article 100262.
  34. Tavana, M. and Hajipour, V. (2020) '[A Practical Review and Taxonomy of Fuzzy Expert Systems Methods and Applications](#),' *Benchmarking: An International Journal*, Vol. 27, No. 1, pp. 81-136.
  35. Aziz, A.A., Mousavi, S.M., Tavana, M. and Niaki, S.T.A. (2020) '[An Investigation of the Robustness in the Travelling Salesman Problem Routes Using Special Structured Matrices](#),' *International Journal of Systems Science: Operations and Logistics*, Vol. 7, No. 2, pp. 172–181.
  36. Hajipour, V., Tavana, M., Santos-Arteaga, F.J., Alinezhad, A. and Di Caprio, D. (2020) '[An Efficient Controlled Elitism Non-Dominated Sorting Genetic Algorithm for Multi-Objective Supplier Selection under Fuzziness](#),' *Journal of Computational Design and Engineering*, Vol. 7, No. 4, pp. 469–488.
  37. Kaviani, M.A., Tavana, M., Kowsari, F. and Rezapour, R. (2020) '[Supply Chain Resilience: A Benchmarking Model for Vulnerability and Capability Assessment in the Automotive Industry](#),' *Benchmarking: An International Journal*, Vol. 27, No. 6, pp. 1929-1949.
  38. Santos-Arteaga, F.J., Tavana, M., Torrecillas, C. and Di Caprio, D. (2020) '[Innovation Dynamics and Financial Stability: A European Union Perspective](#),' *Technological and Economic Development of Economy*, Vol. 26, No. 6, pp. 1366-1398.
  39. Tavana, M., Shaabani, A., Santos-Arteaga, F.J. and Raeesi Vanani, I. (2020) '[A Review of Uncertain Decision-Making Methods in Energy Management using Text Mining and Data Analytics](#),' *Energies*, 13, 3947.
- 2019
40. Tavana, M., Khalili-Damghani, K., Santos Arteaga, F.J. and Hossaini, A. (2019) '[A Fuzzy Multi-Objective Multi-Period Network DEA Model for Efficiency Measurement in Oil Refineries](#),' *Computers and Industrial Engineering*, Vol. 135, pp. 143-155.
  41. Tavana, M., Khosrojerdi, G., Mina, H. and Rahman, A. (2019) '[A Hybrid Mathematical Programming Model for Optimal Project Portfolio Selection using Fuzzy Inference System and Analytic Hierarchy Process](#),' *Evaluation and Program Planning*, Vol. 77.
  42. Santos Arteaga, F.J., Tavana, M., Di Caprio, D. and Toloo, M. (2019) '[A Dynamic Multi-Stage Slacks-Based Measure Data Envelopment Analysis Model with Knowledge Accumulation and Technological Evolution](#),' *European Journal of Operational Research*, Vol. 278, No. 2, pp. 448-462.
  43. Tavana, M., Khanjani Shiraz, R. and Di Caprio, D. (2019) '[A Chance-Constrained Portfolio Selection Model with Random-Rough Variables](#),' *Neural Computing and Applications*, Vol. 31, No. S2, pp. 931-945.
  44. Hajipour, V., Tavana, M., Di Caprio, D., Akhgar, M. and Jabbari, Y. (2019) '[An Optimization Model for Traceable Closed-Loop Supply Chain Networks](#),' *Applied Mathematical Modelling*, Vol. 71, pp. 673-699.
  45. Talaei-Khoei, A., Tavana, M. and Wilson, J.M. (2019) '[A Predictive Analytics Framework for Identifying Patients at Risk of Developing Multiple Medical Complications Caused by Chronic Diseases](#),' *Artificial Intelligence in Medicine*, Vol. 101.
  46. Zare, H., Tavana, M., Mardani, A., Masoudian, S. and Kamali Saraji, M. (2019) '[A Hybrid Data Envelopment Analysis](#)

- [and Game Theory Model for Performance Measurement in Healthcare,](#) *Health Care Management Science*, Vol. 22, No. 3, pp. 475-488.
47. Santos-Arteaga, F.J., Torrecillas, C. and Tavana, M. (2019) [‘Dynamic Effects of Learning on the Innovative Outputs and Productivity in Spanish Multinational Enterprises,’](#) *Journal of Technology Transfer*, Vol. 44, No. 1, pp. 97-131.
  48. Aghayi, N. and Tavana, M. (2019) [‘A Novel Three-Stage Distance-Based Consensus Ranking Method,’](#) *Journal of Industrial Engineering International*, Vol. 15, No. 1, pp. 17-24.
  49. Mousavi, S.M., Alikar, N., Tavana, M. and Di Caprio, D. (2019) [‘An Improved Particle Swarm Optimization Model for Solving Homogeneous Discounted Series-Parallel Redundancy Allocation Problems,’](#) *Journal of Intelligent Manufacturing*, Vol. 30, No. 3, pp. 1175-1194.
  50. Nasiri, M.M., Ranjbar, M., Tavana, M., Santos Arteaga, F.J. and Yazdanparast, R. (2019) [‘A Novel Hybrid Method for Selecting Soccer Players during the Transfer Season,’](#) *Expert Systems*, Vol. 36, No. 1, pp. 1-19.
  51. Mousavi, S.M., Tavana, M., Alikar, N. and Zandieh, M. (2019) [‘A Tuned Hybrid Intelligent Fruit Fly Optimization Algorithm for Fuzzy Rule Generation and Classification,’](#) *Neural Computing and Applications*, Vol. 31, No. 3, pp. 873-885.
  52. Razavi Hajiagha, S.H., Amoozad Mahdiraji, H. and Tavana, M. (2019) [‘A New Bi-Level Data Envelopment Analysis Model for Efficiency Measurement and Target Setting,’](#) *Measurement*, Vol. 147.
  53. Di Caprio, D., Santos-Arteaga, F.J. and Tavana, M. (2019) [‘The Role of Anticipated Emotions and the Value of Information in Determining Sequential Search Incentives,’](#) *Operations Research Perspectives*, Vol. 6.
  54. Shashi, Tavana, M., Shabani, A. and Singh, R. (2019) [‘The Impact of Integration Practices on Supply Chain Value Addition and Firm Performance,’](#) *Journal of Industrial Engineering International*, Vol. 15, No. Suppl 1, pp. S39-S51.
  55. Asadi Bagloee, S., Tavana, M., Withers, G., Patriksson, M. and Asadi, M. (2019) [‘Tradable Mobility Permit with Bitcoin and Ethereum – A Blockchain Application in Transportation,’](#) *Internet of Things*, Vol. 8, Article 100103.
  56. Toloo, M., Tavana, M. and Santos-Arteaga, F.J. (2019) [‘An Integrated Data Envelopment Analysis and Mixed Integer Non-Linear Programming Model for Linearizing the Common Set of Weights,’](#) *Central European Journal of Operations Research*, Vol. 27, No. 4, pp. 887-904.
  57. Ebrahimnejad, A., Tavana, M., Nasser, S.H. and Gholami, O. (2019) [‘A New Method for Solving Dual DEA Problems with Fuzzy Stochastic Data,’](#) *International Journal of Information Technology and Decision Making*, Vol. 18, No. 1, pp. 147-170.
  58. Aghayi, N., Tavana, M. and Maleki, B. (2019) [‘A Malmquist Productivity Index with the Directional Distance Function and Uncertain Data,’](#) *Scientia Iranica*, Vol. 26, No. 6, pp. 3819-3834.
- 2018
59. Tavana, M., Santos-Arteaga, F.J. and Di Caprio, D. (2018) [‘The Value of Information as a Verification and Regret-Preventing Mechanism in Algorithmic Search Environments,’](#) *Information Sciences*, Vol. 448-449, pp. 187-214.
  60. Tavana, M., Di Caprio, D. and Santos-Arteaga, F.J. (2018) [‘An Extended Stochastic VIKOR Model with Decision Maker's Attitude Towards Risk,’](#) *Information Sciences*, Vol. 432, pp. 301-318.
  61. Tavana, M., Abtahi, A.R., Di Caprio, D., Hashemif, R. and Yousefi-Zenouz, R. (2018) [‘An Integrated Location-Inventory-Routing Humanitarian Supply Chain Network with Pre- and Post-Disaster Management Considerations,’](#) *Socio-Economic Planning Sciences*, Vol. 64, pp. 21-37.
  62. Tavana, M., Ebrahimnejad, A., Santos-Arteaga, F.J., Mansourzadeh, S.M. and Kazemi Matin, R. (2018) [‘A Hybrid DEA-MOLP Model for Public School Assessment and Closure Decision in the City of Philadelphia,’](#) *Socio-Economic Planning Sciences*, Vol. 61, pp. 70-89.





63. Tavana, M., Khalili-Damghani, K., Santos Arteaga, F.J., Mahmoudi, R. and Hafezalkotob, A. (2018) '[Efficiency Decomposition and Measurement in Two-Stage Fuzzy DEA Models Using a Bargaining Game Approach](#),' *Computers and Industrial Engineering*, Vol. 118, pp. 394–408.
64. Tavana, M., Shahdi-Pashaki, S., Teymourian, E., Santos-Arteaga, F.J. and Komaki, M. (2018) '[A Discrete Cuckoo Optimization Algorithm for Consolidation in Cloud Computing](#),' *Computers and Industrial Engineering*, Vol. 115, pp. 495-511.
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- 2002
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- 2001
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- 1998
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- 1997
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1990

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1984

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## BOOKS

1. Tavana, M., Nedjah, N. and Alhajj, R. (2021). [Emerging Trends in Intelligent and Interactive Systems and Applications](#), Switzerland: Springer International Publishing.
2. Wang, T.S., Ip, A.W.P., Tavana, M. and Jain, V. (2020). [Recent Trends in Decision Science and Management](#), Singapore: Springer Nature Singapore.
3. Khafa, F., Patnaik, S. and Tavana, M. (2020) [Advances in Intelligent, Interactive Systems and Applications](#), Switzerland: Springer International Publishing.
4. Patnaik, S., Ip, A. W. H., Tavana, M. and Jain, V. (2020) [New Paradigm in Decision Science and Management](#), Singapore: Springer Nature Singapore.
5. Khafa, F., Patnaik, S. and Tavana, M. (2019) [Advances in Intelligent, Interactive Systems and Applications](#), Switzerland: Springer International Publishing.
6. Tavana, M. and Patnaik, S. (Editors) (2018) [Recent Developments in Data Science and Business Analytics](#), Switzerland: Springer International Publishing.
7. Patnaik, S., Yang, X.S., Tavana, M., Popentiu-Vlădicescu, F. and Qiao, F. (Editors) (2018) [Digital Business: Business Algorithms, Cloud Computing and Data Engineering](#), Switzerland: Springer International Publishing.
8. Tavana, M. (Editor) (2017) [Enterprise Information Systems and the Digitalization of Business Functions](#), Hershey, Pennsylvania: IGI Global.
9. Tavana, M., Szabat, K. and Puranam, S. (Editors) (2017) [Organizational Productivity and Performance Measurements Using Predictive Modeling and Analytics](#), Hershey, Pennsylvania: IGI Global.
10. Tavana, M. and Puranam, S. (Editors) (2015) [Handbook of Research on Organizational Transformations through Big Data Analytics](#), Hershey, Pennsylvania: IGI Global.
11. Tavana, M., Ghapanchi, A.H. and Talaei-Khoei, A. (Editors) (2015) [Healthcare Informatics and Analytics: Emerging](#)

*Issues and Trends*, Hershey, Pennsylvania: IGI Global.

12. Tavana, M. (Editor) (2014) '[Analytical Approaches to Strategic Decision-Making: Interdisciplinary Considerations](#),' Hershey, Pennsylvania: IGI Global.
13. Emrouznejad, A. and Tavana, M. (Editors) (2014) '[Performance Measurement with Fuzzy Data Envelopment Analysis](#),' Studies in Fuzziness and Soft Computing, Berlin: Springer-Verlag.
14. Tavana, M. (Editor) (2014) '[Developing Business Strategies and Identifying Risk Factors in Modern Organizations](#),' Hershey, Pennsylvania: IGI Global.
15. Tavana, M. (Editor) (2013) '[Management Theories and Strategic Practices for Decision Making](#),' Hershey, Pennsylvania: IGI Global.
16. Tavana, M. (Editor) (2013) '[Competition, Strategy, and Modern Enterprise Information Systems](#),' Hershey, Pennsylvania: IGI Global.
17. Tavana, M. (Editor) (2012) '[Decision Making Theories and Practices from Analysis to Strategy](#),' Hershey, Pennsylvania: IGI Global.
18. Tavana, M. (Editor) (2012) '[Enterprise Information Systems and Advancing Business Solutions: Emerging Models](#),' Hershey, Pennsylvania: IGI Global.
19. Tavana, M. (Editor) (2011) '[Managing Adaptability, Intervention, and People in Enterprise Information Systems](#),' Hershey, Pennsylvania: IGI Global.

#### BOOK CHAPTERS

1. Emrouznejad, A., Tavana, M. and Hatami-Marbini, A. (2014), '[The State of the Art in Fuzzy Data Envelopment Analysis](#),' In A. Emrouznejad and M. Tavana (Editors), *Performance Measurement with Fuzzy Data Envelopment Analysis*, published in Studies in Fuzziness and Soft Computing (309), pp. 1-45, Berlin: Springer-Verlag.
2. Szabat, K. and Tavana, M. (2009), '[Futurescope 2020: Global Management Support Systems in the Knowledge Age](#),' In A. O'Connor (Editor), *Managing, Trade, Economics and International Business*, pp. 332-342, United Kingdom: Palgrave Macmillan Publications.

#### PROCEDIA PUBLICATIONS

1. Di Caprio, D., Santos-Arteaga, F.J. and Tavana, M. (2016) '[Self-Organizing Social Networks by Preference Similarity and the Networking Capacity of their Users](#),' *Procedia Computer Science*, Vol. 83, pp. 496-503.

#### EDITORIALS

1. Antucheviciene, J., Tavana, M., Nilashi, M. and Bausys, R. (2017). '[Managing Information Uncertainty and Complexity in Decision-Making](#),' *Complexity*, vol. 2017, pp. 1-3.
2. Tavana, M. (2014). '[Editorial](#),' *Decision Analytics*, Vol. 1, No. 1, pp. 1-2.
3. Tavana, M. (2008). '[The Art of Decision Sciences](#),' *International Journal of Applied Decision Sciences*, Vol. 1, No. 1, pp. 1-2.

#### OTHER PUBLICATIONS

1. Tavana, M. (October 2007). '[Alpha Iota Delta launches the International Journal of Applied Decision Sciences \(IJADS\)](#)' *Decision Line*, Vol. 38, No. 5, p. 31.
2. Tavana, M. (October 2006) '[Why Alpha Iota Delta?](#)' *Decision Line*, Vol. 37, No. 5, pp. 21, 35.



3. Tavana, M. (March 2006) '[Information Technology Crunch: Alpha Iota Delta Can Help](#),' *Decision Line*, Vol. 37, No. 2, p. 30.
4. Tavana, M. (January 2006) '[Saint Joseph's University Awarded New Alpha Iota Delta Chapter](#),' *Decision Line*, Vol. 37, No. 1, pp. 14-15.

## EDITORSHIPS

- Editor-in-Chief, [International Journal of Applied Decision Sciences](#) (2007 to Present)
- Editor-in-Chief, [International Journal of Management and Decision Making](#) (2012 to Present)
- Editor-in-Chief, [International Journal of Communication Networks and Distributed Systems](#) (2018 to Present)
- Editor-in-Chief, [International Journal of Knowledge Engineering and Data Mining](#) (2015 to Present)
- Editor-in-Chief, [International Journal of Strategic Decision Sciences](#) (2008 to Present)
- Editor-in-Chief, [International Journal of Enterprise Information Systems](#) (2010 to Present)
- Editor-in-Chief, IGI Global: [Advances in Business Information Systems and Analytics Book Series](#) (2012 to Present)
- Editor-in-Chief, [Decision Analytics](#) (2012 to 2018)

## CONFERENCE COMMITTEES

- General Chair, Fifth International Conference on Intelligent and Interactive Systems and Applications (Shanghai, China, 2020)
- General Chair, Third International Conference on Data Science and Business Analytics (Istanbul, Turkey, 2019)
- General Chair, Second International Conference on Decision Sciences and Management in (Changsha, China, 2019)
- General Chair, Fourth International Conference on Intelligent and Interactive Systems and Applications (Bangkok, Thailand, 2019)
- General Chair, Second International Conference on Data Science and Business Analytics (Changsha, China, 2018)
- General Chair, Third International Conference on Intelligent and Interactive Systems and Applications (Hong Kong, China, 2018)
- General Chair, Second International Conference on Intelligent and Interactive Systems and Applications (Beijing, China, 2017)
- General Chair, First International Conference on Data Science and Business Analytics (Changsha, China, 2017)
- Keynote Speaker, First International Conference on Intelligent and Interactive Systems and Applications (Shanghai, China, 2016)

## ORGANIZATIONAL OFFICERSHIPS

- President, Alpha Iota Delta Honors Society – The International Honor Society in the Decision Sciences and Information Systems (2009 to 2011)
- First Vice-President, Alpha Iota Delta Honors Society – The International Honor Society in the Decision Sciences and Information Systems (2007-2008)
- Second Vice-President, Alpha Iota Delta Honors Society – The International Honor Society in the Decision Sciences and Information Systems (2005-2006)

## INVENTIONS

Tavana, M. 'Software Analysis Tool Integrating Data Flow Diagrams and Petri Nets,' *NASA Registered Invention Number: MSC-23242-1-SB, NASA Contract Number NAS9-00031.*

## SOFTWARE DEVELOPMENT

- [D-cide©](#): An Influence Diagramming-Based Decision Support System
- [D-code©](#): A Natural Language Programming-Based Decision Support System
- [B-wise©](#): A Rule-Based Expert System
- [N-gage©](#): Multi-criteria Decision Making
- Strategic Assessment System©: A Strategic Decision Support System

- Clust-ER©: An Entity-Relationship Clustering System

## DOCTORAL DISSERTATION COMMITTEES

1. E.N. Anilkumar, *Barriers, Enablers and Triple-Bottom-Line Dimensions for the Implementation of Sustainable Practices: Modelling and Analysis*, National Institute of Technology, Calicut, India (2020).
2. V. Singh, *Some Investigations in the Area of Optimization and Implication in Uncertain Environment*, Indian Institute of Technology Roorkee, Roorkee, India (2019).
3. P.S. Sathidevi, *Aggregate Demand and Forecasting in the Context of Vector Integrated Moving Average Process*, National Institute of Technology, Calicut, India (2019).
4. M.B. Nidhi, *Modeling and Analysis of Supply Chain Networks for Sustainability under Carbon Trading Scheme*, National Institute of Technology, Calicut, India (2019).
5. Alka Arya, *Development of Some DEA Models in Uncertain Environments with Applications to Health Sector*, Indian Institute of Technology, Roorkee, India (2018)
6. Joby George, *Evaluation of Inventory Control Policies and Bullwhip Effect Mitigation Strategies in Supply Chains*, National Institute of Technology, Calicut, India (2018).
7. G. Rubell Marion Lincy, *Stochastic Learning and Fuzzy Knowledge-Based Decision Making for Stock Market Trading*, National Institute of Technology Calicut, India (2018).
8. J. Laxmi Lalitha, *Lot Streaming in Flow Shops with Missing Operations and Hybrid Flow Shops*, National Institute of Technology Calicut, India (2018).
9. Nima Kazemi, *The Effect of Human Learning and Forgetting on Fuzzy EOQ Model with Backorders*, University of Malaya, Malaysia (2017).
10. Lokanath Sarangi, *Modeling Intelligent Healthcare using Multi Agent System*, Siksha 'O' Anusandhan University, India (2017).
11. Fatemeh Nikpay, *A Hybrid Post-Implementation Evaluation Method for Enterprise Architecture*, University of Malaya, Malaysia (2017).
12. S.V. Nagabhusan, *Design and Development of Multi-Attribute Auction based E-Procurement Model*, Visvesvaraya Technological University, India (2017).
13. Ehsan Shekarian, *Forward and Backward Fuzzy Economic Order Quantity Models Considering Learning Theory*, University of Malaya, Malaysia (2017).
14. M.N. Anish, *Development and Application of An Instrument for Measuring Service Quality Offered to International Patients*, National Institute of Technology Calicut, India (2017).
15. Morteza Yazdani, *A Comparative Applied Comparison of the Multi-Attribute Decision Making methods*, Universidad Europea, Spain (2016).
16. Sunil Tiwari, *Inventory Strategies for Deteriorating Items in Two Warehouse System*, University of Delhi, India (2016)
17. Alireza Fallahpour, *Development of Decision Making Model for Sustainable Supplier Selection in Manufacturing Industry*, University of Malaya, Malaysia (2016).
18. Anuj Kumar Sharma, *Inventory Decisions under Fuzzy Environment with Different Credit Terms*, University of Delhi, India (2016).
19. Sajan T. John, *Reverse Logistics Network Design: Mathematical Modelling and Analysis*, National Institute of Technology Calicut, India (2015).
20. S. Senthil, *Analysis of Decision Problems in Reverse Logistics Networks Using Hybrid Multi-Criteria Decision Making Methods*, National Institute of Technology Calicut, India (2014).
21. O.N. Arunkumar, *Analysis of the factors affecting working capital management of Indian manufacturing firms*, National Institute of Technology Calicut, India (2014).
22. Kunal Kanti Ghosh, *Offshore Outsourcing of Automotive Design Services in India*, Indian Institute of Technology Kharagpur, India (2014).
23. Hosein Khakbaz, *A Two-Phase Stochastic Programming Based Approach for Container Coordination Management in a Shipping Networks under Uncertainty*, University of Sydney, Australia (2014).
24. C.R. Shiyas, *Development and Analysis of Cell Heterogeneity-Based Models for the Design of Cellular Manufacturing Systems*, National Institute of Technology Calicut, India (2014).
25. Surathkal Raghunandhan, *Strategic Management in Centrally Funded Technical Institutions in India*, National Institute of Technology Karnataka, India (2014).
26. Mariya Sodenkamp, *Models, Methods and Applications of Group Multiple-criteria Decision Analysis in Complex and Uncertain Systems*, University of Paderborn, Paderborn, Germany (2013).
27. Varaprasad Garapati, *A Study on Consumer Adoption of Self-Service Technologies in Banking*, National Institute of Technology Calicut, India (2013).
28. Prasant Rout, *A Strategic Analysis of Implementation and Usage Effectiveness of Enterprise Information Systems in*

- Indian Organisations*, Indian Institute of Technology Kharagpur, India (2013).
29. Hamed Jafarzadeh, *What Forms the Decision of Business to Exploit Search Engine Advertising*, University of New South Wales, Sydney, Australia (2012).
  30. Mandeep Mittal, *Inventory Management with Inspection and Trade Credit*, University of Dehli, Dehli, India (2012)
  31. Le Cong Tru, *A Risk Management Framework for Aquaculture: The Case of Vietnamese Catfish Farming*, RMIT University, Melbourne, Australia (2011).
  32. Amirhossein Ghapanchi, *Dynamic Capabilities and Project Characteristics Contributing to the Success of Open Source Software Projects*, University of New South Wales, Sydney, Australia (2011).
  33. Aditi Khanna nee Aditi Goswami, *Investigating the Impact of Inflation on Inventory Policies*, University of Delhi, Delhi, India (2010).
  34. Kevin K.H. Leung, *An Investigation of Artificial Immune Systems and Variable Selection Techniques for Credit Scoring*, RMIT University, Melbourne, Australia (2009).
  35. Barbara J. Mohebbi, *Implementing a Total Quality Index within Health Care Organizations*. The Wharton School, University of Pennsylvania, Philadelphia, Pennsylvania (1998).

## EXTERNAL REVIEWER

- University of Jyväskylä - Faculty of Information Technology (Finland) (2017)
- Universiti Sains Malaysia - School of Mathematical Sciences (Malaysia) (2017)
- Illinois Institute of Technology - Stuart School of Business (USA) (2015)
- Sultan Qaboos University - College of Economics and Political Science (Oman) (2013)
- Stevens Institute of Technology - Howe School of Technology Management (USA) (2012)
- Saint Joseph's University - Haub School of Business (USA) (2012)
- Pennsylvania State University - Smeal College of Business (USA) (2012)
- Yarmouk University - College of Information Technology and Computer Sciences (JORDAN) (2012)
- Saint Joseph's University - Haub School of Business (USA) (2011)
- Carnegie Mellon University - Tepper School of Business (USA) (2010)

## AWARDS

- Space Act Award, National Aeronautics and Space Administration, Lyndon B. Johnson Space Center (2005)
- John Abbott Award, American Production and Inventory Control Society (1988)

## HONORS

- Alpha Iota Delta Honors Society – The International Honor Society in the Decision Sciences and Information Systems (Inducted April 2003)
- Beta Gamma Sigma Honors Society - The International Honor Society in Business Administration (Inducted April 1999)

## GRANTS

- State of Pennsylvania - Department of Education (Link-to-Learn Grant) (2002-2003): \$183,334
- Kemper Foundation Grants (1993, 1994, 1995, 1996, 1997, and 1998)
- Ben Franklin Partnership Grant (1988)
- PEW Foundation Grants (1985 and 1986)

## GOVERNMENT RESEARCH GRANTS/SBIR CONTRACS

- United States Air Force - Air Force Research Lab - Principal Investigator (Fall 2013)  
Fuzzy Risk Analysis Model for Assessing Availability and Integrity in Command and Control Systems  
Contract Number: FA8750-13-2-0115
- United States Air Force - Air Force Research Lab - Principal Investigator (Fall 2012)  
Fuzzy Robustness and Resiliency Assessment in Integrated Command and Control Systems  
Contract Number: FA8750-11-2-0218



- United States Air Force - Air Force Research Lab - Principal Investigator (Fall 2010)  
Fuzzy Workflow Management Modeling with Petri Nets  
Contract Number: FA8750-09-2-0157
- United States Navy - Naval Research Lab - Stennis Space Center - Principal Investigator (2008-09)  
Autonomous Underwater Vehicle Mission Planning and Control  
Contract Number: N00173-08-P-6201 NRL
- NASA - Johnson Space Center - Principal Investigator (2003-04)  
Intelligent Flight Support System (IFSS): A Real-Time Intelligent Decision Support Prototype  
Small Business Innovation Research (SBIR) Contract Number: 03-1-F6.02-8365 JSC
- NASA - Johnson Space Center - Principal Investigator (1999-00)  
Software Tool for Designing and Evaluating Petri Nets  
Small Business Innovation Research (SBIR) Contract Number: 99-1-11.01-6241 JSC
- NASA - Johnson Space Center Director Grant (1999-2000)  
Advanced Technology Assessment and Selection  
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### SELECTED CONSULTING ACTIVITIES

- Johnson Space Center, Houston, Texas
- Naval Research Lab, Stennis Space Center, Mississippi
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- S&K Electronics, Ronan, Montana
- Crown Cork and Seal, Philadelphia, Pennsylvania
- Prudential Securities, New York, New York
- Philadelphia Bar Association, Philadelphia, Pennsylvania
- Philadelphia Association for Clinical trials, Philadelphia, Pennsylvania
- Lomas and Nettleton Company, Philadelphia, Pennsylvania

### ORGANIZATIONAL MEMBERSHIPS

- Decision Sciences Institute (DSI)
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- Association for Information Systems (AIS)

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National Science Foundation (June 2009)  
Member of the Reviewer Board  
Information and Intelligent Systems: Dynamic Systems I – Open Loop

### COURSES TAUGHT (EXECUTIVE, GRADUATE AND UNDERGRADUATE)

#### La Salle University:

- Information Technology for Decision Making (MBA-820)
- Operational, Tactical, and Strategic Information Systems (EMBA-920)
- Decision Support and Expert Systems (MIS-385 & MIS-785)
- Systems Analysis and Design (MIS-410 & MIS-710)
- Effective and Efficient Management of Operations (BUS-304 & MBA-625)
- Emerging Trends in Information Technology (MIS 405 & MIS-705)
- Information System capstone (MIS-480)
- Database Management Systems (MIS-420 & MIS-720)



- Enterprise Resource Planning (MIS-435)
- Management Information Systems (BUS-205)
- Systems Development and Implementation (MIS-411)

**Rutgers University:**

- Quantitative Skills (53:135:502)
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- Human Computer Interaction/User Interface Design (L103)
- Introduction to Systems Analysis (L512)

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**OTHER ACCOMPLISHMENTS**

- Third Degree Black Belt, World Tae Kwon Do Federation, Seoul, Korea, January 2001.
- Second Degree Black Belt, World Tae Kwon Do Federation, Seoul, Korea, April 1993.
- First Degree Black Belt, World Tae Kwon Do Federation, Seoul, Korea, December 1988.

**PERSONAL**

U. S. Citizen, Married, Two Children.