

# MINGHE SUN – VITAE

## Professor

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## Academic Training

1987–1992 Ph. D. from the Department of Management Sciences and Information Technology, Terry College of Business, the University of Georgia. Major: Management Science and Information Technology. Minor: Production and Operations Management. G.P.A.–4.00/4.00. Dissertation title: Interactive Multiple Objective Programming Procedures via Adaptive Random Search and Feed-Forward Artificial Neural Networks (won 1993 Decision Sciences Institute Elwood S. Buffa Doctoral Dissertation Competition Award). Major Professor: Dr. Ralph E. Steuer.

1985–1987 MBA from the Chinese University of Hong Kong. G.P.A.–3.80/4.00.

1978–1982 BS. from the Northeastern University, Shenyang, China. Major: Nonferrous Metallurgy. G.P.A.–94/100.

## Positions Held and a Summary of Teaching Experience

2003–present Professor, College of Business, The University of Texas at San Antonio

1998–2003 Associate Professor (tenured), College of Business, The University of Texas at San Antonio

1992–1998 Assistant Professor (tenure track), College of Business, The University of Texas at San Antonio  
Courses taught:

- IS 2043 – Data Structures and File Processing
- MS 1023 – Business Statistics with Computer Applications I
- MS 3033 (MGT 3033) – Management Science and Production Management
- MS 3043 – Business Statistics with Computer Applications II
- MS 3053 – Management Science and Operations Technology
- MS 4543 – Supply Chain Management
- MS 5413 – Integrated Global Supply Chain Management
- MS 5003 (MGT 5013) – Quantitative Methods for Business Analysis
- MS 5023 (MGT 5023) – Decision Analysis and Production
- STA 7013 – Advanced Applied Business Statistical Models
- STA 7023 – Applied Linear Statistical Models

1987–1992 Teaching Assistant, Department of Management Sciences and Information Technology, Terry College of Business, The University of Georgia  
Courses taught with full responsibility:

- MS 312 – Statistical Analysis for Business (13 Quarters)
- MS 500/800 – Survey of Operations Research (2 Quarters)
- MS 509 – Applications of Small Computers in Business (2 Quarters)

For the courses above, teaching evaluations of “one of the most effective (among the top 20%)” from the students have been maintained.

- May–June 1995 Invited to work at the International Institute for Applied Systems Analysis (IIASA) as a Visiting Research Scientist.
- 1982–1985 Assistant Lecturer, Department of Management Engineering, Northeastern University, Shenyang, Liaoning, PRC
- 1976–1978 High School Teacher, Shouguang, Shandong, PRC

## Refereed Publications

### Journal Articles:

- Ahmadi, E., H. Mosadegh, R. Maihami, I. Ghalekhondabi, M. Sun and G. A. Süer, “Intelligent Inventory Management Approaches for Perishable Pharmaceutical Products in a Healthcare Supply Chain”, *Computers & Operations Research*. Vol. 147, Article 105968, 2022. <https://doi.org/10.1016/j.cor.2022.105968>.
- Bafahm, A. and M. Sun, “Some Conflicting Results in the Analytic Hierarchy Process”, *International Journal of Information Technology & Decision Making*, Vol. 18, No. 2, pp. 465–486, 2019.
- Beebe, N. L., L. A. Maddox, L. Liu and M. Sun, “Sceadan: Using Concatenated N-Gram Vectors for Improved File and Data Type Classification”, *IEEE Transactions on Information Forensics and Security*, Vol. 8, No. 9, pp. 1519–1530, 2013.
- Cao, B., M. Sun and C. Macleod, “Applying GIS and Combinatorial Optimization to Fiber Deployment Plan”, *Journal of Heuristics*, Vol. 5, No. 4, pp. 385–402, 1999.
- Chen, Z. -Y., Z. -P. Fan and M. Sun, “A Hierarchical Multiple Kernel Support Vector Machine for Customer Churn Prediction Using Longitudinal Behavioral Data”, *European Journal of Operational Research*, Vol. 223, No. 2, pp. 461–473, 2012.
- Chen, Z. -Y., Z. -P. Fan and M. Sun, “Behavior-Aware User Response Modeling in Social Media: Learning from Diverse Heterogeneous Data”, *European Journal of Operational Research*, Vol. 241, No. 2, pp. 422–434, 2015.
- Chen, Z. -Y., Z. -P. Fan and M. Sun, “A Multi-Kernel Support Tensor Machine for Classification with Multitype Multiway Data and an Application to Cross-Selling Recommendations”, *European Journal of Operational Research*, Vol. 255, No. 1, pp. 110–120, 2016.
- Chen, Z. -Y., Z. -P. Fan and M. Sun, “Individual-level Social Influence Identification in Social Media: A Learning-Simulation Coordinated Method”, *European Journal of Operational Research*, Vol. 273, No. 3, pp. 1005–1015, 2019.
- Chen, Z. -Y., Z. -P. Fan and M. Sun, “Tensorial Graph Learning for Link Prediction in Generalized Heterogeneous Networks”, *European Journal of Operational Research*. Vol. 290, No. 1, pp. 219–234, 2021. <https://doi.org/10.1016/j.ejor.2020.05.062>.
- Chen, Z. -Y., Z. -P. Fan and M. Sun, “Machine Learning Methods for Data-driven Demand Estimation and Assortment Planning Considering Cross-selling and Substitutions”, *INFORMS Journal on Computing*. Vol. 35, No. 1, pp. 158–177, 2023. <https://doi.org/10.1287/ijoc.2022.1251>.
- Chen, Z. -Y., Z. -P. Fan and M. Sun, “Inventory Management with Multisource Heterogeneous Information: Roles of Representation Learning and Information Fusion”, *IEEE Transactions on Systems, Man and Cybernetics: Systems*. Vol. 53, No. 9, pp. 5343–5355, 2023. <https://doi.org/10.1109/TSMC.2023.3267858>.
- Chen, Z. -Y., M. Sun and X. -X. Han, “Prediction-driven Collaborative Emergency Medical Resource Allocation with Deep Learning and Optimization”, *Journal of the Operational Research Society*. Vol. 74, No. 2, pp. 590–603, 2023. <https://doi.org/10.1080/01605682.2022.2101953>.

- Drinka, D., M. Sun and B. Murray, “A Multiple Objective Embedded Network Model for Human Resource Planning and an Implementation of the Tchebycheff Method”, *Decision Sciences*, Vol. 27, No. 2, pp. 319–341, 1996.
- Dulebohn, J. H., B. Murray and M. Sun, “Selection among Employer-Sponsored Pension Plans: The Role of Individual Differences”, *Personnel Psychology*, Vol. 53, No. 2, pp. 405–432, 2000.
- Farrokh, M., E. Ahmadi and M. Sun, “A Robust Stochastic Possibilistic Programming Model for Dynamic Supply Chain Network Design with Pricing and Technology Selection Decisions”, *Opsearch*, Vol. 60, pp. 1082–1120, 2023. <https://doi.org/10.1007/s12597-023-00643-2>.
- Graham, R. G. and M. Sun, “An Empirical Analysis of Project Management in a Selected Industrial Area in the Peoples Republic of China”, *Project Management Journal*, Vol. 19, No. 3, pp. 59–64, 1988.
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- Guo, D., Z. -P. Fan and M. Sun, “B2C Car-Sharing Services: Sharing Mode Selection and Value-Added Service Investment”, *Transportation Research Part E: Logistics and Transportation Review*. Vol. 165, Article 102836, 2022. <https://doi.org/10.1016/j.tre.2022.102836>.
- Hao, J., M. Sun and J. Yin, “Convergence to IFRS, Accounting Quality, and the Role of Regional Institutions: Evidence from China”, *Asian Review of Accounting*, Vol. 27, No. 1, pp. 29–48, 2019.
- Hassanzadeh, F., H. Nemati and M. Sun, “Robust Optimization for Interactive Multiobjective Programming with Imprecise Information Applied to R&D Project Portfolio Selection”, *European Journal of Operational Research*, Vol. 238, No. 1, pp. 41–53, 2014.
- He, N., Z. -Z. Jiang, M. Sun, and Y. Sheng, “Group Buying of Competing Retailers with Fairness Concerns”, *Journal of Systems Science and Systems Engineering*, Vol. 29, No. 6, pp. 655–674, 2020. <https://link.springer.com/article/10.1007/s11518-020-5468-y>.
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- Sun, M., W. Zang, W. Zhang, Z. Wang, D. Jiang and X. Liu, “A Double-Strand DNA Genetic Algorithm for Multi-objective Optimization”, presented at the 49<sup>th</sup> Annual Conference of the Decision Sciences Institute, Chicago, IL, November 17–19, 2018.

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## **Non-refereed Publications**

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- Chen, Z.-Y., Z.-P. Fan and M. Sun, “A Hierarchical Multiple Kernel Support Vector Machine for Customer Churn Prediction Using Longitudinal Behavioral Data”, Working Paper Series No. 0038MSS-061-2012, College of Business, University of Texas at San Antonio, 2012.
- Chen, Z.-Y., Z.-P. Fan and M. Sun, “Behavior-aware User Response Modeling in Social Media: Learning from Diverse Heterogeneous Data”, Working Paper No. 0033MSS-061-2013, College of Business, University of Texas at San Antonio, 2013.
- Graham, R. G. and M. Sun, “A Comparative Analysis of Project Management in Hong Kong and Shenyang”, working paper, Business Research Center at Hong Kong Baptist College, 1988.
- Hassanzadeh, F., Nemati, H., Sun, M., “Robust Optimization for Interactive Multiobjective Programming with Imprecise Information Applied to R&D Project Portfolio Selection”, Working Paper No. 0011MSS-061 -2013, College of Business, University of Texas at San Antonio, 2013.
- Sun, M., “TABU MACHINE: A New Neural Network Solution Approach for Combinatorial Optimization Problems”, Working Paper Vol. 17, No. 1, Institute for Studies in Business, College of Business, UTSA, 1996.
- Sun, M., “An Interactive Multiple Objective Programming Procedure Using Tchebycheff Programs and Feed-Forward Artificial Neural Networks”, Working Paper 94–01, Institute for Studies in Business, College of Business, UTSA, 1994.
- Sun, M., “Warm-Start Routines for Solving Multiple Objective Network Programming Problems”, Working Paper, Institute for Studies in Business, College of Business, The University of Texas at San Antonio, San Antonio, Texas, Vol. 21, No.2, 2000a.
- Sun, M., “Finding Integer Efficient Solutions for Multiple Objective Network Programming Problems”, Working Paper, Institute for Studies in Business, College of Business, The University of Texas at San Antonio, San Antonio, Texas, Vol. 21, No. 4, 2000b.
- Sun, M., “Procedures for Finding Nondominated Solutions for Multiple Objective Network Programming Problems”, Working Paper, Institute for Studies in Business, College of Business, The University of Texas at San Antonio, San Antonio, Texas, Vol. 21, No. 5, 2000c.
- Sun, M., “A Primogenitary linked Quad Tree Approach for Solution Storage and retrieval in Heuristic Binary Optimization”, Working Paper No. 0010MSS-061-2007, College of Business, The University of Texas at San Antonio, 2007.
- Sun, M., “A Tabu Search Heuristic Procedure for the Capacitated Facility Location Problem”, Working Paper No. 0050MSS-061-2008, College of Business, The University of Texas at San Antonio, 2008.

- Sun, M., “A Mixed Integer Programming Model for Multiple-Class Discriminant Analysis”, Working Paper No. 0102MSS-061-2009, College of Business, The University of Texas at San Antonio, 2009.
- Sun, M., “A Branch-and-Bound Algorithm for Representative Integer Efficient Solutions in Multiple Objective Network Programming Problems”, Working Paper No. 0007MSS-061-2010, College of Business, The University of Texas at San Antonio, 2010.
- Sun, M., Philippart, J., Doucet, J.L., Lejeune, P., “Mathematical formulation and exact solution for landing location problem in tropical forest selective logging, a case study in Southeast Cameroon”, Working Paper Series No. 0009MSS-061-2012, College of Business, The University of Texas at San Antonio, 2012.
- Sun, M. and A. Stam, “Operations Research Techniques Applied to the Training of Feed Forward Artificial Neural Networks”, Working Paper 91–327, Terry College of Business, The University of Georgia, 1991.
- Sun, M. and A. Stam, “Neural Meta Networks: The ‘Society of Mind’ Idea”, Working Paper 91–328, Terry College of Business, The University of Georgia, 1991.
- Sun, M., A. Stam and R. E. Steuer, “Solving Interactive Multiple Objective Programming Problems Using Artificial Neural Networks”, Working Paper #93364, Terry College of Business, The University of Georgia, 1993.
- Sun, M. and A. Stam, “On the Analytical Hierarchy Process, Principal Eigenvectors and the Hopfield Neural Network”, Working Paper 94–401, Terry College of Business, The University of Georgia, 1994.
- Sun, M., J. E. Aronson, P. G. McKeown and D. Drinka, “A Tabu Search Heuristic Procedure for the Fixed Charge Transportation Problem”, Working Paper 95–414, Terry College of Business, The University of Georgia, 1995.
- Sun, M., D. Drinka and J. E. Aronson, “Implementation Data Structures for a Tabu Search Heuristic Procedure for Solving the Fixed Charge Transportation Problem”, Working Paper 95–418, Terry College of Business, The University of Georgia, 1995.
- Stam, A., M. Sun and M. Haines, “Artificial Neural Network Representations for Hierarchical Preference Structures”, Working Paper WP95033, International Institute for Applied Systems Analysis, Laxenburg, Austria, 1995.
- Sun, M., A. Stam and R. E. Steuer, “Solving Multiple Objective Programming Problems Using Feed-Forward Artificial Neural Networks: The Interactive FFANN Procedure”, Working Paper WP-95-46, International Institute for Applied Systems Analysis, Laxenburg, Austria, 1995.
- Sun, M., A. Stam and R. E. Steuer, “Interactive Multiple Objective Programming Using Tchebycheff Programs and Artificial Neural Networks” Working Paper WP-95-58, International Institute for Applied Systems Analysis, Laxenburg, Austria, 1995.
- Sun, M., “A Tabu Search Heuristic Procedure for Solving the Transportation Problem with Exclusionary Side Constraints”, Working Paper Vol. 18, No. 1, Institute for Studies in Business, College of Business, UTSA, 1996.
- Sun, M., J. E. Aronson, P. G. McKeown and D. Drinka, “A Tabu Search Heuristic Procedure for the Fixed Charge Transportation Problem”, Working Paper Vol. 16, No. 2, Institute for Studies in Business, College of Business, UTSA, 1995.

## **Work in Progress**

### **Papers under Review or under Revision:**

- Chen, Z. -Y. and M. Sun, “Deep Stacking Kernel Machines for the Data-driven Multi-item One-warehouse Multi-retailer Problem”, submitted to *INFORMS Journal on Computing*. (first revision)
- Chen, Z. -Y. and M. Sun, “Data-driven Contract Design for Supply Chain Coordination with Algorithm Sharing and Algorithm Competition”, submitted to *IIE Transactions*. (second review)
- Ding, X. -F., M. Sun and H. -C. Liu, “Large Group Emergency Decision Making Using Linguistic Z-Numbers and the QUALIFLEX method”, submitted to *Omega: The International Journal of Management Science*. (first review)



- Dong, X., X. Li, B. Hu, H. Sun, M. Sun, K. Lin and J. Xue, “Estimating Urban's Taxi Sharing Potential: A Case Study of Chengdu”, submitted to *Transportation Research Part A: Policy and Practice*. (first review)
- Guo, D., Z. -P. Fan, M. Sun and N. Li, “Financing Provision and Value-Added Service Investment in a Capital-Constrained Sharing Service Supply Chain”, submitted to *European Journal of Operational Research*. (first review)
- Guo, D., Z. -P. Fan and M. Sun, “Offline Operations Strategies of Bike-sharing Platforms with a Single Purpose or Dual Purposes in a Duopoly Market”, submitted to *Transportation Research. Part C: Emerging Technologies*. (second review)
- Guo, Y., C. Bai and M. Sun, “Effects of Green Supplier Integration and Green Supplier Development in Competing Supply Chains”, submitted to *Naval Research Logistics*. (third review)
- Jiang, Z., J. Liu, H. Yi, and M. Sun, “Laser Welding Design Optimization with a Multiobjective Evolutionary Algorithm Based on Incremental Support Vector Regression and Local Search”, submitted to *Annals of Operations Research*. (first review)
- Jiang, Z., J. Zhao, M. Sun and M. Wan, “Joint Optimization of Parts-to-picker Online Order Picking and Delivery with Due Dates”, submitted to *International Journal of Production Economics*. (first review)
- Kim, J.-C., R. Qiu, J.-H. Jon and M. Sun, “Multi-objective programming for multi-period multi-product closed-loop supply chain network design: A fuzzy robust optimization approach”, submitted to *Environmental Science and Pollution Research*. (first review)
- Li, D., X. Liu and M. Sun, “Hierarchical Spiking Neural P systems with Weights on Multiple Channels for graph-based node classification”, submitted to *Theoretical Computer Science*. (first review)
- Li, G., Z. -P. Fan, Q. Zhao and M. Sun, “E-commerce Supply Chain Sales Mode Selection Considering Blockchain Technology Adoption for Consumer Privacy Protection”, submitted to *Omega: The International Journal of Management Science*. (first review)
- Li, K., Z. -H. Liu, M. Sun and H. -Q. Su, “Conditions for Resale Price Maintenance Implementation under Retailer's Countervailing Power”, submitted to *International Journal of Industrial Organization*. (first review)
- Li, K. Y. Meng and M. Sun, “PVI Strategy Considering Bargaining Power: An Empirical Analysis of the Chinese Automobile Market,” submitted to *Managerial and Decision Economics*. (first review)
- Li, K., H. -Q. Su, M. Sun and Z. -H. Liu, “Consumer Preference and Retailer’s Countervailing Power”, submitted to *International Journal of Industrial Organization*. (first review)
- Liu, X., W. Zang, M. Sun, L. Ma, Y. Zhao and X. Liu, “Density Peaks Clustering Using Multiple Feature Points”, submitted to *Applied Intelligence*. (first review)
- Ouyang, L., B. Tao, L. Liu, M. Sun and M. Wang, “Double-robust Bayesian Variable Selection and Model Prediction with Spherically Symmetric Errors”, submitted to *IIEE Transactions*. (first revision)
- Qi, Y., X. Zhou and M. Sun, “Forms of Competition, Quality Innovation and Vertical Integration”, submitted to *International Journal of Industrial Organization*. (first review)
- Qin, X., Y. Zhu, Z.-Z. Jiang, M. Sun, and X. Li, “The Interplay between the Contract Forms and the Verifiability of the Intelligent Maintenance Capacity in the Equipment After-Sales Service”, submitted to *IEEE Transactions on Engineering Management*. (first review)
- Qiu, R., Y. Yu and M. Sun, “Channel selection considering consumer reference quality effect in a two-tier supply chain”, submitted to *Journal of Retailing and Consumer Services*. (first review)
- Qiu, R., M. Yuan and M. Sun, “Optimizing Omnichannel Retailer Inventory Replenishment Using Capacity-sharing with Demand Uncertainties and Service Level Requirements”, submitted to *European Journal of Operational Research*. (first review)
- Shang, Y., C. Bai and M. Sun, “Bank or Retailer? Capital-Constrained Manufacturer Financing Using Carbon Emission Quota as a Pledged Asset”, submitted to *International Journal of Production Research*. (first review)

- Sun, M., “A Mixed Integer Programming Model for Feature Selection in Multi-Class Classification”, submitted to *Journal of the Operational Research Society*. (first review)
- Sun, M., “A Tabu Search Procedure for a Feature Selection Mixed Integer Programming Model in Multiple-Class Classification”, submitted to *Journal of Heuristics*. (first review)
- Sun, Y., R. Qiu, S. Shao and M. Sun, “Omnichannel Strategies and Pricing and Ordering Decisions of an Online-first Retailer Considering Product Returns”, submitted to *Computers & Industrial Engineering*. (first review)
- Xiang, T., Y. Zou, Y. Huang, T. H. Malik and M. Sun “Measuring Climate Smart Agriculture Total Factor Productivity: A Malmquist-Luenberger Index Analysis of 100 Countries, 1961–2016”, submitted to *World Development*. (first review)
- Xin, C. T. Chen and M. Sun, “Effects of COVID-19-induced Role Stress on the Employee Knowledge Hiding Behaviors”, submitted to *Journal of Business Research*. (first review)
- Xin, C., C. Zheng and M. Sun, “COVID-19-induced Stress and Employee Innovation: A Contingent Model Based on the Conservation of Resources Theory”, submitted to *Current Psychology*. (first review)
- Yin, X., X. Liu, M. Sun and J. Xue, “Hypergraph-based Numerical Spiking Neural P Systems with Novel Repartition Protocols”, submitted to *International Journal of Neural Systems*. (first review)
- Yu, Y., R. Qiu, M. Sun and Z. Li, “Supply Chain Quality and Pricing Decisions with Retailer Fairness Concerns and Consumer Dynamic Reference Quality Effects”, submitted to *Journal of Industrial and Management Optimization*. (second review)
- Zhao, Q., Z. -P. Fan and M. Sun, “Platform Sales Mode Selection and Manufacturer Decision on Joining the Blockchain System in a Platform-based Supply Chain”, submitted to *International Journal of Production Research*. (second review)
- Zhao, Q., Z. -P. Fan and M. Sun, “Manufacturer Blockchain Technology Adoption Strategies for Different Sales Channels in an E-commerce Platform Supply Chain”, submitted to *Annals of Operations Research*. (first review)
- Zhao, Q., Z. -P. Fan, M. Sun and F. Yan, “Analysis of Blockchain Technology Adoption Decision in a Fresh Product Supply Chain: The Impacts of the Double-edged Sword Effect and the Delivery Logistics Mode”, submitted to *European Journal of Operational Research*. (first review)
- Zhang, X., X. Liu, Q. Ren, M. Sun and Y. Zhao, “A Universal Neural Membrane Computing Model”, submitted to *Information Sciences*. (first review)

### **Papers under Preparation:**

- Agrell, P. J. and M. Sun, “A Multiple Criteria Facility Location Model and a Tabu Search Procedure.” (analysis)
- Drinka, D. and M. Sun, “Two Dimensional Data Adjustment Problems and an Extension to Adjustment Techniques.” (analysis)
- Sun, M., “On the EMMD Linear Programming Formulation for Discriminant Analysis.” (first draft)
- Sun, M., “An Interactive Solution Procedure for Multiple Objective Network Flow Problems.” (analysis)
- Sun, M., “A Column Assembly Approach for Quadratic Programming Problems in a Multiple-Class Support Vector Machines.” (first draft)
- Sun, M., “A Warm Start Routine for Quadratic Programming Problems in a Multiple-Class Support Vector Machines.” (first draft)
- Sun, M. and P J. Agrell, “Data Structure, Algorithmic Specification and Computational Results of A Tabu Search Procedure for the Multiple Criteria Facility Location Problem.” (analysis)
- Sun, M. and R. E. Steuer, “Solving Nonlinear Multiobjective Programming Problems through Discrete Representation.” (first draft)

## Professional Services and Activities

### Editorship and Conference Committee:

- Editorial Board (member), *International Scholarly Research Notices* (2014–present).
- Editorial Board (member), *The Scientific World Journal* (2013–present).
- Editorial Board (member), *International Journal of Data Science* (2013–present).
- Associate Editor, *Decision Analytics* (2012–present).
- Editorial Board (member), *International Journal of Information Technology & Decision Making* (2000–present).
- Editorial Board (member), *The Springer Series in Quantitative Management* (2011–present).
- Associate Editor, *International Journal of Strategic Decision Sciences* (2008–present)
- Editorial Board (member), *ISRN Applied Mathematics* (2010–2014)
- Associate Editor, *Information Science and Technology* (2010–present)
- Local Arrangements Committee (chair), POMS 2000, the 11<sup>th</sup> Annual Meeting of the Production Operations Management Society, San Antonio, TX, April 1–4, 2000.
- Program Committee (member), Chinese Academy of Sciences Symposium on Data Mining and Knowledge Management (CASDMKM–04), Beijing, July 12–14, 2004.
- Local Committee (member), INFORMS Optimization Society Conference, Optimization and Healthcare, San Antonio, TX, February 3–5, 2006.
- Program Committee (member), MOPGP’06, the 7th International Conference devoted to Multi-Objective Programming and Goal Programming, Loire Valley, France, June 12–14, 2006.
- Founding member of the International Academy of Information Technology and Quantitative Management (IAITQM), founded at Omaha, NE. on June 3, 2012.
- Publication Committee (member), International Academy of Information Technology and Quantitative Management (IAITQM).
- Program Committee (member), the first International Conference on Information Technology and Quantitative Management (ITQM 2013), May 16–18, 2013, Suzhou, China.
- Program Committee (member), the second International Conference on Information Technology and Quantitative Management (ITQM 2014), June 3–5, 2014, Moscow, Russia.
- Program Committee (member), DeLTA 2020: 1st International Conference on Deep Learning Theory and Applications, July 8–10, 2020, Paris, France, Online Streaming due to COVID-19.
- Program Committee (member), DeLTA 2021: 2st International Conference on Deep Learning Theory and Applications, July 7–9, 2021, Lieusaint-Paris, France.

### Society Memberships:

- Institute for Operations Research and the Management Sciences (INFORMS)
- Decision Sciences Institute (DSI)
- International Society on Multiple Criteria Decision Making

### Conferences Attended:

- TIMS Southeastern Regional Conference, Myrtle Beach, SC, October 3–4, 1991

TIMS/ORSA 31<sup>st</sup> Joint National Conference, Nashville, TN, May 12–15, 1991

ORSA/TIMS 32<sup>nd</sup> Joint National Conference, Anaheim, CA, November 3–6, 1991

DSI 22<sup>nd</sup> Annual Conference, Miami Beach, FL, November 24–26, 1991

TIMS/ORSA 33<sup>rd</sup> Joint National Conference, Orlando, FL., April 26–29, 1992

ORSA/TIMS 34<sup>th</sup> Joint National Conference, San Francisco, CA, November 1–4, 1992

TIMS/ORSA 35<sup>th</sup> Joint National Conference, Chicago, IL, May 16–19, 1993.

DSI 24<sup>th</sup> Annual Conference, Washington, D. C., November 21–23, 1993.

TIMS/ORSA 37<sup>th</sup> Joint National Conference, Boston, MA., April 24–27, 1994.

XIIth International Conference on Multiple Criteria Decision Making, Hagen, Germany, June 1995.

The Sixth National Conference on Multiple Criteria Decision Making, Beijing, P. R. China, August 14–15, 1995.

INFORMS New Orleans Fall 1995 Conference, New Orleans, LA, October 29–November 1, 1995.

DSI 26<sup>th</sup> Annual Conference, Boston, MA, November 20–22, 1995.

INFORMS San Diego Spring 1997, San Diego, CA, May 4–7, 1997.

DSI 28<sup>th</sup> Annual Conference, San Diego, CA., Nov. 22–25, 1997.

INFORMS Seattle Fall 1998, Seattle, WA., October 25–28, 1998.

IFORS'99 Beijing, P. R. C., August 16–20, 1999.

DSI 30<sup>th</sup> Annual Conference, New Orleans, LA., November 20–23, 1999.

POMS 2000, the 11<sup>th</sup> Annual Conference of the Production Operations Management Society, San Antonio, TX, April 1–4, 2000.

INFORMS National Conference, San Antonio, Texas, November 5–8, 2000.

DSI 31<sup>st</sup> Annual Conference, Orlando, FL, November 18–21, 2000.

DSI 34<sup>th</sup> Annual Conference, Washington, D.C., November 22–25, 2003.

DSI 37<sup>th</sup> Annual Conference, San Antonio, TX, November 18–21, 2006.

ICM'2007, the 6<sup>th</sup> International Conference on Management, Wuhan, P. R. China, August 3–5, 2007.

DSI 39<sup>th</sup> Annual Conference, Baltimore, MD, November 22–25, 2008.

DSI 40<sup>th</sup> Annual Conference, New Orleans, LA, November 14–17, 2009.

The 7th International Conference on Natural Computation and The 8th International Conference on Fuzzy Systems and Knowledge Discovery, Shanghai, China, July 26–28, 2011.

The Inauguration Conference of the International Academy of Information Technology and Quantitative Management (IAITQM), Omaha, Nebraska, June 3, 2012.

POMS 28th Annual Meeting, Seattle, WA, May 5–8, 2017.

DSI 48<sup>th</sup> Annual Conference, Washington DC, Nov. 18-20, 2017.

POMS 29th Annual Meeting, Houston, TX, May 4–7, 2018.

DSI 49<sup>th</sup> Annual Conference, Chicago, IL, November 17–19, 2018.

DSI 50<sup>th</sup> Annual Conference, New Orleans, LA, Nov. 22–25, 2019.

## **Session Chairs:**

- “Multiple Objective Programming Techniques”, TIMS/ORSA National Meeting, Chicago, IL, May 16–19, 1993 (Invited).
- “The Analytical Hierarchy Process: Methods (I)”, DSI 24<sup>th</sup> Annual Meeting, Washington, D. C., November 21–23, 1993.
- “MCDM: Method and Applications,” INFORMS National Meeting, Seattle, WA, October 25–28, 1998 (Invited).
- “Multiple Objective Programming,” INFORMS National Meeting, San Antonio, Texas, November 5–8, 2000.
- “MS/OR and Technology,” DSI 31<sup>st</sup> annual Meeting, Orlando, FL., November 18–21, 2000.
- “Panel Session of Decision and Optimization,” ICM’2007, the 6<sup>th</sup> International Conference on Management, Wuhan, P. R. China, August 3–5, 2007.
- “Transportation and Logistics,” DSI 39<sup>th</sup> annual Meeting, Baltimore, MD., November 22–25, 2008.
- “Supply Chain Decisions,” DSI 40<sup>th</sup> Annual Meeting, New Orleans, LA, November 14–17, 2009.
- “Sustainable Logistics,” POMS 2018, Houston, TX, May 4–7, 2018.
- “Business Analytics, Analytics Method” DSI 48<sup>th</sup> Annual Meeting, Chicago, IL, November 17-19, 2018.

## **Discussant:**

- Southeastern TIMS 27<sup>th</sup> Annual Meeting, Myrtle Beach, SC., October 3–4, 1991.
- DSI 24<sup>th</sup> Annual Meeting, Washington, D. C., November 21–23, 1993.
- DSI 30<sup>th</sup> Annual Meeting, New Orleans, LA., November 20–23, 1999.
- DSI 31<sup>st</sup> Annual Meeting, Orlando, FL, November 18–21, 2000.

## **Referee for:**

*Decision Sciences*

*IEEE Transactions on Systems, Man, and Cybernetics*

*Annals of Operations Research*

*IIE Transactions*

*Information Systems and Operational Research*

*European Journal of Operational Research*

*OMEGA the International Journal of Management Science*

*International Journal of Operations and Quality Management*

*Operations Research*

*Management Science*

*Computational Economics*

*Networks*

*Multi-Criteria Decision Analysis*

*Computers & Mathematics with Applications*

*International Journal of Information Technology & Decision Making*

*Journal of Systems Science and Systems Engineering*

*Computer-Aided Civil and Infrastructure Engineering*

*IEEE Transactions on Evolutionary Computation*

*International Journal of Neural Systems*

*International Journal of Operational Research*

### **Reviewer for:**

National Science Foundation

ANNIE-92, Artificial Neural Networks in Engineering, St. Louis, November 1992

Austrian Federal Ministry for Science and Research

Decision Sciences Institute 1999 Annual Conference (MS Track and POM Track)

2000 Southwest Academy of Management Conference (Operations/Technology/Innovation/MIS/Quality track)

2000 Americas Conference on Information Systems (AMCIS), Association for Information Systems

*Proceedings of the 15<sup>th</sup> International Meeting of the International Society on Multiple Criteria Decision Making.*

Decision Sciences Institute 2000 Annual Conference (MS Track)

World Scientific Publishing Co. (Book Proposal)

Kluwer Academic Publishers (Journal Proposal)

2nd Annual Global Information Technology Management (GITM) World Conference, Dallas, Texas, June 2001

Decision Sciences Institute 2001 Annual Conference (MS Track)

Decision Sciences Institute 2002 Annual Conference (MS Track)

Decision Sciences Institute 2003 Annual Conference (MS Track)

Decision Sciences Institute 2004 Annual Conference (MS Track)

Decision Sciences Institute 2008 Annual Conference (MS Track)

The Hong Kong Research Grants Council (RGC)

Wiley and Sons (Book Chapters)

South-western (Book Chapters)

McGraw-Hill Irwin (Books and Book Chapters)

*Adaptive Memory and Evolution: Tabu Search and Scatter Search* (Book, Kluwer Academic Publishers)

*The Handbook of Optimization in Medicine* (edited by Panos Pardalos and Edwin Romeijn)

MOPGP'06, the 7th International Conference devoted to Multi-Objective Programming and Goal Programming.

The 7th International Conference on Natural Computation and the 8th International Conference on Fuzzy Systems and Knowledge Discovery, Shanghai, China, July 26–28, 2011.

IISE Annual Conference and Expo 2020.

### **External Reviewer:**

Tenure and promotion review for The University of Alaska at Anchorage, 2003.

Ph.D. Thesis review for the Nanyang Technological University, Singapore, 2012.

Faculty promotion review for the Huazhong University of Science and Technology, 3 faculty members for 2012, one faculty member 2013.

Reviews of proposal for the award of Chang Jiang Scholars sponsored by the Department of Human Resources of the Ministry of Education of PRC, 18 proposals for 2013.

Ph.D. Thesis review for the National University of Singapore, Singapore, 2019.

Tenure and promotion review for Georgia Southern University, 2019.

## **Institutional Services**

### **Doctoral Dissertation Committees Served:**

Bazoumana Kone, Department of Management Science and Statistics, College of Business, The University of Texas at San Antonio, 2012–2014. (member)

Hong Cai, Transform Based Information Extraction and Analysis, Department of Electrical Engineering, The University of Texas at San Antonio, 2005–2007. (member)

Tao Wei, Expectation Propagation Algorithm for Bayesian Inference in Dynamic Systems, Department of Electrical Engineering, The University of Texas at San Antonio, 2005–2007. (member)

LaKami Baker, The Relationship between Mindfulness, Strategic Decision Process and Small Business Performance, Department of Management, The University of Texas at San Antonio, 2005–2007. (member)

Michael Burns, Department of Management, The University of Texas at San Antonio, 2008–present. (member)

Indu Ramachandran, Department of Management, The University of Texas at San Antonio, 2010–2012. (member)

### **Master Thesis Committee Served:**

Beibei Yu, Using Geostatistical Methods to Improve Radar Rainfall Estimates Accuracy, Department of Environmental Science and Engineering, The University of Texas at San Antonio, 2008–2009. (member)

Chris Loudon, Classification of Data under Autoregressive Circulant Covariance Structure with Comparisons to Compound Symmetric Covariance Structure, Department of Management Science and Statistics, College of Business, The University of Texas at San Antonio, 2008. (member)

### **Committees**

Division of Management and Marketing Graduate Studies Committee (member) from 1994 to 2000.

Division of Management and Marketing Recruiting Committee (member) for an assistant professor position in management science from fall 1996 to spring 1997.

College of Business Search Committee (member) for the Management and Marketing Division Director from fall 1997 to spring 1998.

College of Business Curriculum and Program Review Committee (member) from 1997 to 2000.

College of Business Academic Policy and Curriculum Committee (member) from 1997 to 2000.

Division of Management and Marketing Recruiting Committee (member) for an assistant professor position in applied statistics from fall 1998 to spring 1999.

College of Business Ad-Hoc Ph.D. Committee (member) from 1998 to 2000.

Division of Management and Marketing Faculty Review Advisory Committee (member) from 1998 to 2001.

College of Business Faculty Review Advisory Committee (member) 1998.

College of Business U.S.-China Business Education Initiative Committee (member) from spring 1999 to 2008.

Division of Management and Marketing Recruiting Committee (member) for a visiting professor position in marketing, spring 1999.

Division of Management and Marketing Recruiting Committee (Affirmative Action Advocate) for One position (Associate Professor or Professor) in Strategy or Organizational Theory and one (Assistant Professor, Associate Professor, or Professor) in Human Resources, fall 2000.

College of Business Recruiting Committee (member) for the Director of Asian Studies, fall 2000.

College of Business Research Advisory Board (member) fall 2000–2001.

Department of Management Science and Statistics Recruiting Committee (Affirmative Action Advocate) for an Assistant/Associate/Professor position in Statistics 2002–2003.

Department of Management Science and Statistics Comprehensive Periodic Evaluation Committee 2001–present.

Department of Management Science and Statistics Faculty Review and Advisory Committee 2001–present.

Department of Management Science and Statistics Graduate Programs Committee 2005–present.

College of Business Ph.D./Research Committee (member) 2000–2003.

College of Business Faculty Forum/Graduate Faculty Forum Executive Committee Executive Committee (member) 2001–2004.

College of Business Tenure and Promotion Committee (member) 2005–2007.

University of Texas at San Antonio Faculty Senator 2001–2003.

University of Texas at San Antonio Faculty Senate Nominating and Elections Committee (member) 2001–2003.

University of Texas at San Antonio University Assembly (member) 2001–2003.

Department of Information Systems and Cyber Security Comprehensive Periodic Evaluation Committee 2013

Department of Management Science and Statistics Ph.D. Admissions Committee (member) 2006–2015.

College of Business International Grants Fund Committee (member) 2009–2016.

College of Business Scholarship Committee (member) 2013–present.

Department of Management Science and Statistics Comprehensive Periodic Evaluation Review (D-CPER) committee (Chair) 2014.

Department Faculty Review Advisory Committee (DFRAC) (Chair) 2014.

College of Business MBA Programs Committee (member) 2014–2017.

University of Texas at San Antonio Parking Appeals Panel (member) 2014–present.

UTSA Core Curriculum Committee Member September 1, 2016–2020

UTSA Core Curriculum Teaching Award Selection Committee, Committee Member September 1, 2016–2019.

Department Faculty Review Advisory Committee (DFRAC) (Chair) 2017.

Department of Marketing Periodic Performance Evaluation Review Committee, 2018.

University of Texas at San Antonio OIT Faculty Advisory Committee (member) 2018–2020.

Department of Management Science and Statistics Recruiting Committee (member) for an Assistant/Associate/Full Professor position in the UTSA AI cluster hiring, 2018–2019.

Department of Management Science and Statistics Recruiting Committee (member) for an Assistant Professor in Supply Chain and Operational Analytics, 2019–2020.

Department of Management Science and Statistics Recruiting Committee (chair) for an Assistant Professor in AI/Data Mining/Decision Science, 2019–2020.

College of Business Faculty Review Advisory Committee (CFRAC) (member) 2019–present.

Department Periodic Performance Evaluation Review Committee (member) 2019.



College of Business Research Excellence Team (redesign the incentives of Dean's Distinguished Research Award) 2020–present.

University of Texas at San Antonio Parking and Traffic Committee (member, appointed) 2020–present.

Department of Marketing Faculty Review Advisory Committee (DFRAC) 2020–2021.

Department of Management Science and Statistics Faculty Annual Review Committee (member) 2020–2021.

Department of Management Science and Statistics Faculty Annual Review Committee (chair) 2021–2022.

Department of Management Science and Statistics Recruiting Committee (member) for an Assistant Professor in Business Analytics, 2022–2023.

Department of Management Science and Statistics Recruiting Committee (chair) for an Open Rank Position in Operations and Supply Chain Management, 2023–2024.

University of Texas at San Antonio University Faculty Grievance Committee 2022–

University of Texas at San Antonio Formal Review Panel of the University Faculty Grievance Committee for a case review, 2023

### **Scholarship Sponsorship**

Established the Lily and Minghe Sun Scholarship in Management Science, 2022.

### **Biographical Listings**

2001–present *Who's Who in America*, Marquis Who's Who.

2004–present *Who's Who in American Education*, Marquis Who's Who.

2005–present *Who's Who in Finance and Business*, Marquis Who's Who.

2006–present *Who's Who in the World*, Marquis Who's Who.

2002 *2000 Outstanding Intellectuals of the 21<sup>st</sup> Century*, International Biographical Centre, UK.

2005 *Leading Educators of the World*, International Biographical Centre, UK.

### **Honors, Awards and Recognition**

2019 Favorite Business Professor voted by the UTSA student body.

2006 Best Theoretical/Empirical Research Paper Award from the Decision Sciences Institute for the paper “A Multiple-Class Support Vector Machine, Theory and Model” received at the 37<sup>th</sup> Annual Meeting, November 18–21, 2006, San Antonio, TX.

2003 Best Theoretical/Empirical Research Paper Award from the Decision Sciences Institute for the paper “Multiple-Group Discriminant and Classification Analysis with Linear Programming Approaches” received at the 34<sup>th</sup> Annual Meeting, November 22–25, 2003, Washington D. C.

2000 University of Texas at San Antonio College of Business Advisory Council the Col. Jean Migliorino and Lt. Col. Philip Piccione Endowed Faculty Award for Research Excellence.

2000 Award for Outstanding Service as the Local Arrangements Chair of the 11th Annual Meeting of the Production Operations Management Society.

1999 University of Texas System Chancellor's Council Outstanding Teaching Award.

1998 Outstanding Paper Award for the paper “Strategic Groups and Performance in the Nursing Home Industry: A Reexamination” by the Southern Management Association.

ANBAR cited the paper “A Multiple Objective Embedded Network Model for Human Resource Planning and an Implementation of the Tchebycheff Method,” *Decision Sciences*, Vol. 27, No. 2, pp. 319–341, 1996, coauthored with D. Drinka and B. Murray, with the Highest Quality Rating (The Practice Implications Hall of Fame and The Originality Hall of Fame).

ANBAR cited the paper “Solving Multiple Objective Programming Problems Using Feed-Forward Artificial Neural Networks: The Interactive FFANN Procedure”, *Management Science*, Vol. 42, No. 6, pp. 835–849, 1996, coauthored with A. Stam and R. E. Steuer, with the Highest Quality Rating (The Research Implications Hall of Fame).

- 1997 University of Texas at San Antonio College of Business Advisory Council Teaching, Research and Service Combined Award.
- 1995 University of Texas at San Antonio College of Business Advisory Council Research Award.
- 1993 Elwood S. Buffa Doctoral Dissertation Competition Award presented by the Decision Sciences Institute on the 21st day of November 1993 at the plenary session of the national meeting at Washington D. C. for the dissertation entitled “Interactive Multiple Objective Programming Procedures via Adaptive Random Search and Feed Forward Artificial Neural Networks.”
- 1990–1991 Graduate School Research Assistantship and the Merit Supplement from the Graduate School, The University of Georgia.  
Ph. D. Research Assistantship from Terry College of Business, The University of Georgia.
- 1988–1990 Graduate School Assistantship from the Graduate School, The University of Georgia.
- 1988–1989 Merit Supplement to the Graduate School Assistantship from the Graduate School, The University of Georgia.  
Ph. D. Research Assistantship from Terry College of Business, The University of Georgia.
- 1987–1990 Comer Fellowship from Terry College of Business, The University of Georgia.
- 1987–1992 Teaching Assistantship from the Department of Management Sciences and Information Technology, The University of Georgia.
- 1985–1987 Graduate Studentship from the Graduate School, the Chinese University of Hong Kong.
- 1987 Lee Sheung Shun Academic Award from the Graduate School, the Chinese University of Hong Kong. 1982 First Honorary Scholarship from the Northeastern University, PRC, (The Northeastern University's highest distinction of outstanding students).
- 1978–1981 Elected as the Most Promising Student in every academic year during the four years of undergraduate study.

## Faculty Development

- Spring 2005 Faculty Development Leave, the University of Texas at San Antonio
- Spring 2008 Pearson Business Statistics Forum, Hilton Head, SC, February 22–24, 2008
- Spring 2009 Faculty Development Leave, the University of Texas at San Antonio
- Spring 2009 Pearson Business Statistics Forum, Boston, MS, March 6–8, 2009

## Grants

- 2013–2014 Beebe, N. and M. Sun “Advanced Research in Data Type Classification”, Naval Postgraduate School, \$205197.
- 2001–2002 “Solving Uncapacitated Facility Location Problems Using Tabu Search”, UTSA Faculty Research Award.

- 2000 “Integer Efficient Solutions for Multiple Objective Network Programming Problems,” a Faculty Summer Research Grant from the College of Business, The University of Texas at San Antonio.
- 1999 “Finding Nondominated Solutions for Multiple Objective Network Flow Problems”, a Faculty Summer Research Grant from the College of Business, The University of Texas at San Antonio.
- 1997–1998 “A Branch-and-Bound Algorithm for Solving the Transportation Problems with Exclusionary Side Constraints”, UTSA Faculty Research Award.
- 1996 “A Tabu Search Heuristic Procedure for Solving the Transportation Problem with Exclusionary Side Constraints”, a Faculty Summer Research Grant from the College of Business, The University of Texas at San Antonio.
- 1995 “TABU MACHINE: A New Neural Network Solution Approach for Combinatorial Optimization Problems”, a Faculty Summer Research Grant from the College of Business, The University of Texas at San Antonio.
- 1993–1994 “A Tabu Search Heuristic Procedure for the Fixed Charge Transportation Problems”, UTSA Faculty Research Award.
- 1993 “An Interactive Tchebycheff - Feed-Forward Artificial Neural Network Multiple Objective Programming Procedure”, a Faculty Summer Research Grant from the College of Business, The University of Texas at San Antonio.
- 1986–1987 “Project Management in China”, from the Chinese University of Hong Kong.
- 1986 “Multiobjective Programming Model for a Regional Social and Economic System”, from the City Science and Technology Association of Wafangdian City, Liaoning, China.