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 3033 (MGT 3033) - Management Science and Production Management

MS 3043 Business Statistics with Computer Applications II MS 3053 Management Science and Operations Technology

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:

- 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.
- 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.
- 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.
- Lutz, C. M., K. R. Davis and M. Sun, "Determining Buffer Location and Size in Production Lines Using Tabu Search," *European Journal of Operational Research*, Vol. 106, No. 2-3, pp. 301-316, 1998.
- Marlin, D., J. W. Huonker and M. Sun, "An Examination of the Relationship between Strategic Group Membership and Hospital Performance," *Health Care Management Review*, Vol. 27, No. 4, pp. 18-29, 2002.
- Marlin, D., M. Sun and J. W. Huonker, "Strategic Groups and Performance in the Nursing Home Industry: A Reexamination," *Medical Care Research and Review*, Vol. 56, No. 2, pp. 156-176, 1999.
- Stam, A., M. Sun and M. Haines, "Artificial Neural Network Representations for Hierarchical Preference Structures," *Computers & Operations Research*, Vol. 23, No. 12, pp. 1191-1201, 1996.
- Steuer, R. E. and M. Sun, "The Parameter Space Investigation Method for Multiple Objective Nonlinear Programming: A Computational Investigation," *Operations Research*, Vol. 43, No. 4, pp. 641-648, 1995.
- Stummer, C and M. Sun, "New Multiobjective Metaheuristic Solution Procedures for Capital Investment Planning," *Journal of Heuristics*, Vol. 11, No. 3, pp. 183-199, 2005.
- Sun, M., "A Tabu Search Heuristic Procedure for Solving the Transportation Problem with Exclusionary Side Constraints," *Journal of Heuristics*, Vol. 3, No. 4, pp. 305-326, 1998.
- Sun, M., "A Multiple Objective Programming Approach for Determining Faculty Salary Equity Adjustments," *European Journal of Operational Research*, Vol. 138, No. 2, pp. 302-319, 2002.
- Sun, M., "The Transportation Problem with Exclusionary Side Constraints and Two Branch-and-Bound Algorithms," *European Journal of Operational Research*, Vol. 140, No. 3, pp. 629-647, 2002.

- Sun, M., "Procedures for Finding Nondominated Solutions for Multiple Objective Network Programming Problems," *Transportation Science*, Vol. 37, No. 2, pp. 139-152, 2003.
- Sun, M., "Warm-Start Routines for Solving Augmented Weighted Tchebycheff Programs in Multiple Objective Network Programming," *INFORMS Journal on Computing*, Vol. 17, No. 4, pp. 422-437, 2005.
- Sun, M., "Some Issues in Measuring and Reporting Solution Quality of Interactive Multiple Objective Programming Procedures," *European Journal of Operational Research*, Vol. 162, No. 2, pp. 468-483, 2005.
- Sun, M., "Solving Uncapacitated Facility Location Problems Using Tabu Search," *Computers and Operations Research*, Vol. 33, No. 9, pp. 2563-2589, 2006.
- Sun, M., "A Primogenitary Linked Quad Tree Data Structure and Its Application to Discrete Multiple Criteria Optimization," *Annals of Operations Research*, Vol. 147, No. 1, pp. 87-107, 2006.
- Sun, M., "Linear Programming Approaches for Multiple-Class Discriminant and Classification Analysis," *International Journal of Strategic Decision Sciences*, Vol. 1, No. 1, pp. 57-80, 2010.
- Sun, M., "Finding Integer Efficient Solutions for Multiple Objective Network Programming Problems," *Networks*, forthcoming, 2010.
- Sun, M., "A Mixed Integer Programming Model for Multiple-Group Discriminant Analysis," *International Journal of Information Technology & Decision Making*, forthcoming, 2010.
- Sun, M. "A Tabu Search Heuristic Procedure for the Capacitated Facility Location Problem," *Journal of Heuristics*, forthcoming, 2010.
- Sun, M., "A Primogenitary Linked Quad Tree Approach for Solution Storage and Retrieval in Heuristic Binary Optimization," *European Journal of Operational Research*, Vol. 209, No. 3, pp. 228-240, 2011.
- Sun, M., J. E. Aronson, P. G. McKeown and D. Drinka, "A Tabu Search Heuristic Procedure for the Fixed Charge Transportation Problem," *European Journal of Operational Research*, Vol. 106, No. 2-3, pp. 441-456, 1998.
- Sun, M. and P. G. McKeown, "Tabu Search Applied to the General Fixed Charge Problem," *Annals of Operations Research*, Vol. 41, pp. 405-420, 1993.
- Sun, M. and H. Nemati, "TABU MACHINE: A New Neural Network Solution Approach for Combinatorial Optimization Problems," *Journal of Heuristics*, Vol. 9, No. 1, pp. 5-27, 2003.
- Sun, M., A. Stam and R. E. Steuer, "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.
- Sun, M., A. Stam and R. E. Steuer, "Interactive Multiple Objective Programming Using Tchebycheff Programs and Artificial Neural Networks," *Computers & Operations Research*, Vol. 27, No. 7-8, pp. 601-620, 2000.
- Sun, M. and R. E. Steuer, "InterQuad: An Interactive Quad Tree Based Procedure for Solving the Discrete Alternative Multiple Criteria Problem," *European Journal of Operational Research*, Vol. 89, No. 3, pp. 462-472, 1996.
- Sun, M. and R. E. Steuer, "Quad Trees and Linear List for Identifying Nondominated Criterion Vectors," *INFORM Journal on Computing*, Vol. 8, No. 4, pp. 367-375, 1996.
- Sun, M. and M. Xiong, "A Mathematical Programming Approach for Gene Selection and Tissue Classification," *Bioinformatics*, Vol. 19, No. 10, pp. 1243-1251, 2003.

Book Chapters:

- Drinka, D. and M. Sun, "A Human Resource Planning Multiple Objective Embedded Network Model and its Tchebycheff Method Implementation," in *Multiple Criteria Decision Making, Theory and Applications*, J. Gu, G. Chen, Q. Wei and S. Wang (eds.), pp. 177-184, SCI-TECH Information Service, Vindsor, Berks, U.K., 1995.
- Stam, A., M. Sun and M. Haines, "Feed-Forward Neural Networks for Approximating Pairwise Preference Structures," in Multiple Criteria Decision Making, G. Fandel and T. Gal (eds.), *Lecture Notes in Economics and Mathematical Systems*, Vol. 448, pp. 413-420, Springer-Verlag, New York, NY, 1997.
- Sun, M., "A Tabu Search Heuristic Procedure for the Uncapacitated Facility Location Problem," in C. Rego and B. Alidaee (eds.), *Metaheuristic Optimization via Memory and Evolution: Tabu Search and Scatter Search*, Kluwer Academic Publishers, Boston, MA, pp. 191-211, 2005.
- Sun, M., "*z* -Distribution", in Salkind, N. J. (ed.), *Encyclopedia of Research Design*, Sage Publications, Inc., Thousand Oaks, CA, Vol. 3, pp. 1653-1657, 2010.
- Sun, M., "z-Score", in Salkind, N. J. (ed.), *Encyclopedia of Research Design*, Sage Publications, Inc., Thousand Oaks, CA, Vol. 3, pp. 1662-1667, 2010.
- Sun, M., "z-Test", in Salkind, N. J. (ed.), *Encyclopedia of Research Design*, Sage Publications, Inc., Thousand Oaks, CA, Vol. 3, pp. 1667-1674.
- Sun, M. and R. E. Steuer, "Quad Tree Data Structures for Use in Large-Scale Discrete Alternative Multiple Criteria Problems," in Shi, Y. and M. Zeleny (eds.), *New Frontiers of Decision Making for the Information Technology Era*, World Scientific Publishing Co., River Edge, NJ, pp. 48-71, 2000.

Conference Proceedings:

- Agrell, P. J., M. Sun and A. Stam, "A Tabu Search Multi-Criteria Decision Model for Facility Location Planning," *Proceedings of the 1997 DSI Annual Meeting*, San Diego, California, Vol. 2, pp. 908-910, 1997.
- Nemati, H., M. B. Montaner and M. Sun, "A Multi-Agent Framework for Web Based Information Retrieval and Filtering," *Proceedings of the 2000 Americas Conference on Information Systems (AMCIS 2000)*, pp. 308-310, 2000.
- Stummer C., M. Sun, "A Tabu Search Heuristic for R&D Project Portfolio Selection," *Proceedings of the 6th Metaheuristics International Conference*, Vienna, Austria, pp. 847-852, 2005.
- Sun, M., "The AHP, Principal Eigenvectors and the Hopfield Neural Network," *Proceedings of the 1993 DSI Annual Meeting*, Vol. 2, pp. 1024-1026, 1993.
- Sun, M., "Applying Tabu Search to Multiple Objective Combinatorial Optimization Problems," *Proceedings of the* 1997 DSI Annual Meeting, San Diego, California, Vol. 2, pp. 945-947, 1997.
- Sun, M., "Determining Faculty Salary Equity Adjustments: A Multiple Objective Programming Approach," *Proceedings of the 1999 DSI Annual Meeting*, New Orleans, Louisiana, Vol. 2, pp. 891-893, 1999.
- Sun, M., "Discrete Multiple Criteria Optimization via a Primogenitary Linked Quad Tree Data Structure," *Proceedings of the 2001 DSI Annual Meeting*, San Francisco, California, pp. 1034-1036, 2001.
- Sun, M., "An Improved Tabu Search Heuristic Procedure for the Capacitated Facility Location Problem," *Proceedings of the 2009 DSI Annual Meeting*, New Orleans, Louisiana, pp. 1461-1466, 2009.

- Sun, M., "Finding Integer Efficient Solutions in Multiple Objective Network Flow Problems with a Branch-and-Bound Algorithm," *Proceedings of the 2010 DSI Annual Meeting*, San Diego, California, pp. 321-326, 2010.
- Sun, M., D. Drinka and J. E. Aronson, "Implementation Data Structures for a Tabu Search Heuristic Procedure for Solving the Fixed Charge Transportation Problem," *Proceedings of the 1995 DSI Annual Meeting*, Vol. 2, pp. 915-917, 1995.
- Sun, M., E. A. Ducati and V. A. Armentano, "Solving Capacitated Facility Location Problem Using Tabu Search," in Zhang, J., W. Zhang, X. Xia and J. Liao (eds), *Globalization Challenge and Management Transformation, Proceedings of ICM*'2007, Science Press, Beijing, China, Vol. 1, pp. 76-81, 2007.
- Sun, M. and R. G. Graham, "An Empirical Analysis of Project Management in Selected Areas in PRC," *Proceedings of the Chinese Style Business Administration Seminar*, Hong Kong, 1986.
- Sun, M. and R. E. Steuer, "Quad Tree Data Structures for Discrete Multiple Criteria Optimization," *Proceedings of the 2000 DSI Annual Meeting*, Vol. 2, pp. 905-907, 2000.

Paper Presentations

- Agrell, P. J. and M. Sun, "Multi-Criteria Facility Location Planning Using Tabu Search," presented at the 2nd Operations Research Conference in Habana, Cuba, March 1997.
- Agrell, P. J., M. Sun and A. Stam, "A Tabu Search Multi-Criteria Decision Model for Facility Location Planning," presented at the Decision Sciences Institute 1997 Annual Meeting, San Diego, CA., Nov. 22-25, 1997.
- Drinka, D. and M. Sun, "Tabu Search Applied to the Transportation Problem with Incremental Quantity-Discounted Costs," presented at the TIMS/ORSA Joint National Meeting, Chicago, IL., May 16-19, 1993 (Contributed).
- Drinka, D. and M. Sun, "A Solution Approach for Network Models with Multiple Objectives," presented at the TIMS/ORSA Joint National Meeting, Boston, April 24-27, 1994 (Contributed).
- Drinka, D. and M. Sun, "Application of an Interactive Multiple Objective Solution Approach to 2-Dimensional Data Adjustment Problems," presented at the INFORMS National Meeting, Los Angeles, CA., April 23-26, 1995 (Contributed).
- Drinka, D. and M. Sun, "A Human Resource Planning Multiple Objective Embedded Network Model and its Tchebycheff Method Implementation," presented at the Sixth National Conference on Multiple Criteria Decision Making, Beijing, P. R. China, August 14-15, 1995.
- Graham, R. G. and M. Sun, "A Comparative Analysis of Project Management in Hong Kong and Shenyang," presented at the Pan-Pacific Conference VII in Seoul Korea, June 1990.
- Graham, R. G. and M. Sun, "A Comparative Analysis of Project Management in Hong Kong, Shenyang and Portland Oregon USA," presented at Asian Institute of Business Conference Hong Kong, June 1990.
- Lutz, C. M., K. R. Davis and M. Sun, "Applying Tabu Search to Estimate the Optimal Buffer Location and Size in Production Lines," presented at the DSI 25th Annual Meeting, Honolulu, Hawaii, November 20-22, 1994.
- Marlin, D., M. Sun and J. W. Huonker, "Strategic Groups and Performance in the Nursing Home Industry: A Reexamination," presented at the Southern Management Association Annual Conference, New Orleans, November 4-7, 1998.
- Nemati, H. R. and M. Sun, "A Neural Network Tabu Machine for the Travelling Salesman Problem," presented at the TIMS/ORSA Joint National Meeting, Detroit, October 23-26, 1994 (Invited).

- Stam, A., M. Sun and R. E. Steuer, "Solving Multiobjective Programming Problems Through a Feed-Forward Artificial Neural Network," Proceedings of the First University of Kansas Business PhD Alumni Workshop, Lawrence, Kansas, May 1993.
- Stam, A., M. Sun and M. Haines, "Artificial Neural Network Representations for Hierarchical Preference Structures," presented at the XIIth International Conference on Multiple Criteria Decision Making: Twenty Years of East-West Cooperation in MCDM, Hagen, Germany, June 1995.
- Stam, A. and M. Sun, "Neural Network Representations of Pairwise Preference Structures," presented at the TIMS XXXIII International Conference, Singapore, June 18-23, 1995 (Invited).
- Stam, A. and M. Sun, "Artificial Neural Network Representations for Preference Judgment in the AHP," presented at the College of Business Faculty Forum, UTSA, March 8, 1995.
- Stam, A., M. Sun and R. E. Steuer, "Solving Multiple Objective Programming Problems Using Feed-Forward Artificial Neural Networks: The Interactive FFANN Procedure," presented as a Guest Seminar at the Helsinki School of Economics, Helsinki, Finland, November 1994; also presented at the Helsinki University of Technology, Espoo, Finland, November 1994; at the Faculty of Mathematics and Computing Science, Technical University of Eindhoven, The Netherlands, April 1995; at the Faculty of Technical Mathematics and Informatics, Delft University of Technology, The Netherlands, April 1995; at the Department of Business Informatics, Rotterdam School of Management, Erasmus University, The Netherlands, April 1995; at the RWTH Aachen Institute of Technology, Germany, May 1995; at the Department of Economics, University of Siegen, Germany, May 1995; at the Faculty of Economics and Statistics, University of Konstanz, Germany, May 1995.
- Stummer C., M. Sun, "A Tabu Search heuristic for R&D project portfolio selection," presented at the 6th Metaheuristics International Conference, Vienna, Austria, August 22-26, 2005.
- Sun, M., "Sobol's Parameter Space Investigation Method for MOP Problems: A Computational Investigation," presented at the College of Business Faculty Forum, UTSA, November 20, 1992.
- Sun, M., "An Interactive Adaptive Random Search Procedure for Nonlinear Multiple Objective Programming Problems," presented at the College of Business Faculty Forum, UTSA, March 31, 1993.
- Sun, M., "An Interactive Multiple Objective Programming Procedure Using Tchebycheff Program and an Artificial Neural Network," presented at the College of Business Faculty Forum, UTSA, December 3, 1993.
- Sun, M., "An Interactive Tchebycheff Feed-Forward Artificial Neural Network Multiple Objective Programming Procedure," presented at the TIMS/ORSA Joint National Meeting, Boston, April 24-27, 1994 (Invited).
- Sun, M., "Tabu Machine A New Artificial Neural Network Optimization Approach," presented at the College of Business Faculty Forum, UTSA, April 29, 1994.
- Sun, M., "An Interactive Discrete Multiple Objective Programming Procedure via a Quad Tree Data Structure," presented at the First Conference on Management Science for Domestic and Overseas Young Scientists (CMSDOYS'94), Beijing, China, July 19-22, 1994 (Invited).
- Sun, M., "History and Progress of Multiple Objective Programming," presented to the faculty and graduate students in the College of Business, Northeastern University, Shenyang, China, July 13, 1994.
- Sun, M., "A Tabu Search Heuristic Procedure for the Fixed Charge Transportation Problem," presented at the INFORMS National Meeting, New Orleans, October 29-November 1, 1995 (Invited).
- Sun, M., "Solving Combinatorial Optimization Problems with Tabu Machines," presented at the College of Business Faculty Forum, UTSA, April 24, 1996.

- Sun, M., "A Tabu Search Heuristic Procedure for Solving the Transportation Problem with Exclusionary Side Constraints," presented at the College of Business Faculty Forum, UTSA, October 23, 1996.
- Sun, M., "Applying Tabu Search to the Fixed Charge Transportation Problem (Some Computational Results)," presented at the INFORMS National Meeting, San Diego, CA, May 4-7, 1997 (Invited).
- Sun, M., "A Tabu Search Heuristic Procedure for Solving the Transportation Problem with Exclusionary Side Constraints," presented at the INFORMS National Meeting, San Diego, CA, May 4-7, 1997 (Invited).
- Sun, M., "Applying Tabu Search to Multiple Objective Combinatorial Optimization Problems," presented at the Decision Sciences Institute 1997 Annual Meeting, San Diego, CA, Nov. 22-25, 1997.
- Sun, M., "A Multiple Objective Network Programming Solution Procedure," presented at the INFORMS National Meeting, Seattle, October 25-28, 1998 (Invited).
- Sun, M., "Finding Nondominated Solutions for Multiple Objective Network Problems," presented at IFORS'99, Beijing, P. R. C., August 16-20, 1999 (Contributed).
- Sun, M., "Warm-Start Routines for Solving Multiple Objective Network Programming Problems," presented at the College of Business Faculty Forum, UTSA, October 6, 1999.
- Sun, M., "Determining Faculty Salary Equity Adjustments: A Multiple Objective Programming Approach," presented at Decision Sciences Institute 1999 Annual Meeting, New Orleans, Louisiana, Nov. 20-23, 1999.
- Sun, M., "The Transportation Problem with Exclusionary Side Constraints and Some Solution Methods," presented at POM 2000, the 11th Annual Meeting of the Production Operations Management Society, San Antonio, TX, April 1-4, 2000.
- Sun, M., "Finding Integer Efficient Solutions for Multiple Objective Network Programming Problems," presented at INFORMS National Meeting, San Antonio, Texas, November 5-8, 2000 (Invited).
- Sun, M., "Branch & Bound Algorithms for the Transportation Problem with Exclusionary Side Constraints," presented at INFORMS National Meeting, San Antonio, Texas, November 5-8, 2000 (Invited).
- Sun, M., "A Tabu Search Heuristic Solution Procedure for Uncapacitated Facility Location Problems," presented at the Departmental Colloquium, Department of Mathematics, Trinity University, San Antonio, TX, March 6, 2001.
- Sun, M., "A Tabu Search Heuristic Procedure for Solving Uncapacitated Facility Location Problems," presented at the International Conference on Adaptive Memory and Evolution: Tabu Search and Scatter Search, Oxford, MS, March 7-11, 2001.
- Sun, M., "Multiple-Group Discriminant and Classification Analysis with Linear Programming Approaches," presented at Decision Sciences Institute 2003 Annual Meeting, Washington D.C., Nov. 22-25, 2003.
- Sun, M., "Linear Programming Approaches for Multiple-Class Discriminant and Classification Analysis," presented at the Research Colloquium of The Department of Management Science and Statistics, College of Business, The University of Texas at San Antonio, September 16, 2005.
- Sun, M., "A Support Vector Machine for Multiple-Class Classification," presented at the Research Colloquium of The Department of Management Science and Statistics, College of Business, The University of Texas at San Antonio, September 27, 2006.
- Sun, M., "A Multiple-Class Support Vector Machine, Theory and Model," presented at the 37th Annual Meeting of the Decision Sciences Institute, San Antonio, TX, November 18-21, 2006.

- Sun, M., "Using a Primogenitary Linked Quad Tree for Solution Storage and Retrieval in Heuristic Binary Optimization," presented at the 39th Annual Meeting of the Decision Sciences Institute, Baltimore, MD, November 22-25, 2008.
- Sun, M., "Using a Primogenitary Linked Quad Tree for Solution Storage and Retrieval in Heuristic Binary Optimization," presented at the Seminar of The Department of Management Science and Statistics, College of Business, The University of Texas at San Antonio, October 3, 2008.
- Sun, M., "An Improved Tabu Search Heuristic Procedure for the Capacitated Facility Location Problem," presented at the 40th Annual Meeting of the Decision Sciences Institute, New Orleans, Louisiana, November 14-17, 2009.
- Sun, M. and P. J. Agrell, "A Tabu Search Solution Procedure for a Multiple Criteria Facility Location Problem," presented at the INFORMS National Meeting, Seattle, October 25-28, 1998 (Invited).
- Sun, M., J. E. Aronson and P. G. McKeown, "Solving Fixed Charge Transportation Problems Using Tabu Search," presented at the ORSA/TIMS Joint National Meeting, San Francisco, CA, November 1-4, 1992 (Invited).
- Sun, M., D. Drinka and J. E. Aronson, "Implementation Data Structures for a Tabu Search Heuristic Procedure for Solving the Fixed Charge Transportation Problem," presented at the 26th Annual Meeting of the Decision Sciences Institute, Boston, MA, November 20-22, 1995.
- Sun, M., E. A. Ducati and V. A. Armentano, "Solving Capacitated Facility Location Problem Using Tabu Search," presented at ICM'2007, The 6th International Conference on Management, Wuhan, P. R. China, August 3-5, 2007.
- Sun, M. and L. R. Gardiner, "Some Issues in the Computational Testing of Interactive Multiple Objective Programming Procedures," presented at the XIIth International Conference on Multiple Criteria Decision Making: Twenty Years of East-West Cooperation in MCDM, Hagen, Germany, June 18-23, 1995.
- Sun, M. and L. R. Gardiner, "Caveats in Interpreting Computational Results of Interactive Multiple Objective Programming procedures," presented at the INFORMS National Meeting, New Orleans, October 29-November 1, 1995 (Invited).
- Sun, M. and R. G. Graham, "An Empirical Analysis of Differences Between Project Management in Hong Kong and in Areas of PRC," presented at the Economics & Management Sino-American Seminar, Beijing, China, 1987.
- Sun, M. and P. G. McKeown, "Tabu Search Applied to the General Fixed Charge Problem," presented at the Southeastern TIMS 27th Annual Meeting, Myrtle Beach, SC., October 3-4, 1991.
- Sun, M. and H. Nemati, "TABU MACHINE: A New Method of Solving Combinatorial Optimization Problems," presented at the TIMS/ORSA Joint National Meeting, Boston, April 24-27, 1994 (Invited).
- Sun, M., A. Stam and R. E. Steuer, "Solving Multiple Objective Programming Problems with a Feed-Forward Artificial Neural Network," presented at the TIMS/ORSA Joint National Meeting, Orlando, FL., April 26-29, 1992 (Invited); also presented in Seminar Series of the Center for Interdisciplinary Business Research (CIBRE), Katholieke Universiteit Leuven, Belgium, November 1992; and as an MDA Guest Seminar at IIASA, Laxenburg, Austria, July 1993.
- Sun, M. and R. E. Steuer, "Rolling Ball Method for Complicated Nonlinear Multiple Objective Programming Problems," presented at the TIMS/ORSA Joint National Meeting, Chicago, IL., May 16-19, 1993 (Invited).
- Sun, M. and R. E. Steuer, "Quad Tree Data Structures for Discrete Multiple Criteria Optimization," presented at the 2000 DSI Annual Meeting, Nov. 18-21, 2000.

- Sun, M. and M. Xiong, "A Mathematical Programming Approach for Gene Selection and Tumor Classification," presented at the 52nd Annual Meeting of the American Society of Human Genetics, Baltimore, Maryland, October 15 19, 2002.
- Xiong, M. and M. Sun, "A Multiple Criteria Optimization Approach for Tumor Classification," presented at the INFORMS National Meeting, Miami Beach, November 4-7, 2001.

Non-refereed Publications

Monograph:

Zalay, M., A. Inn, M. Sun and I. Chou, American and Chinese Perception and Belief System, Institute of Comparative Social and Cultural Studies Inc., Washington, D. C., 1986.

Working Papers:

- 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.
- 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. 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:

- Philippart, J., M. Sun, J.-L. Doucet, J. Rondeux and P. Lejeune, "Mathematical Formulation and Tabu Search Solution for the Landing Location Problem for Selective Logging in Tropical Forests, A Case Study in South-East Cameroon," submitted to *Journal of Forest Economics*. (first revision)
- Sun, M., "A Support Vector Machine for Multiple-Class Classification," submitted to the *Computers & Operations Research*. (first review)
- Sun, M., "A Brach-and-Bound Algorithm for Integer Efficient Solutions in Multiple Objective Network Programming Problems," submitted to *Networks*. (first review)
- Sun, M., "A Mixed Integer Programming Model for Feature Selection in Multiple-Class Classification," submitted to *European Journal of Operational Research*. (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)

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 Tabu Search Procedure for a MIP Model for Variable Selection in Multiple-Class Classification." (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)
- Sun, M. and M. Xiong, "A Mathematical Programming Approach for Gene Selection and Tissue Classification with Multiple Groups." (analysis)
- Sun, M. and M. Xiong, "A Tabu Search Heuristic Procedure for Biomarker Identification." (analysis)

Professional Services and Activities

Editorship and Conference Committee:

Editorial Board (member), International Journal of Information Technology & Decision Making (2000 – present).

Associate Editor, International Journal of Strategic Decision Sciences (2008 - present)

Editorial Board (member), ISRN Applied Mathematics, (2010 – present)

- Local Arrangements Committee (chair), POM 2000, the 11th 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.

Doctoral Dissertation Committees Served:

- 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)

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 Louden, 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)

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 Meeting, Myrtle Beach, SC, October 3-4, 1991

TIMS/ORSA 31st Joint National Meeting, Nashville, TN, May 12-15, 1991

ORSA/TIMS 32nd Joint National Meeting, Anaheim, CA, November 3-6, 1991

DSI 22nd Annual Meeting, Miami Beach, FL, November 24-26, 1991

TIMS/ORSA 33rd Joint National Meeting, Orlando, FL., April 26-29, 1992

ORSA/TIMS 34th Joint National Meeting, San Francisco, CA, November 1-4,1992

TIMS/ORSA 35th Joint National Meeting, Chicago, IL, May 16-19, 1993.

DSI 24th Annual Meeting, Washington, D. C., November 21-23, 1993.

TIMS/ORSA 37th Joint National Meeting, 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 Meeting, New Orleans, LA, October 29-November 1, 1995.

DSI 26th Annual Meeting, Boston, MA, November 20-22, 1995.

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

DSI 28th Annual Meeting, 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 30th Annual Meeting, New Orleans, LA., November 20-23, 1999.

POM 2000, the 11th Annual Meeting of the Production Operations Management Society, San Antonio, TX, April 1-4, 2000.

INFORMS National Meeting, San Antonio, Texas, November 5-8, 2000.

DSI 31st Annual Meeting, Orlando, FL, November 18-21, 2000.

DSI 34th Annual Meeting, Washington, D.C., November 22-25, 2003.

DSI 37th Annual Meeting, San Antonio, TX, November 18-21, 2006.

ICM'2007, the 6th International Conference on Management, Wuhan, P. R. China, August 3-5, 2007.

DSI 39th Annual Meeting, Baltimore, MD, November 22-25, 2008.

DSI 40th Annual Meeting, New Orleans, LA, November 14-17, 2009.

Session Chairs:

"Multiple Objective Programming Techniques," TIMS/ORSA National Meeting, Chicago, IL, May 16-19, 1993 (Invited).

"The Analytical Hierarchy Process: Methods (I)," DSI 24th 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 31st annual Meeting, Orlando, FL., November 18-21, 2000.

"Panel Session of Decision and Optimization," ICM'2007, the 6th International Conference on Management, Wuhan, P. R. China, August 3-5, 2007.

"Transportation and Logistics," DSI 39th annual Meeting, Baltimore, MD., November 22-25, 2008.

"Supply Chain Decisions," DSI 40th Annual Meeting, New Orleans, LA, November 14-17, 2009.

Discussant:

Southeastern TIMS 27th Annual Meeting, Myrtle Beach, SC., October 3-4, 1991.

DSI 24th Annual Meeting, Washington, D. C., November 21-23, 1993.

DSI 30th Annual Meeting, New Orleans, LA., November 20-23, 1999.

DSI 31st 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

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 15th 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.

External Reviewer for Tenure and Promotion for:

The University of Alaska at Anchorage

Institutional Service

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 Post-Tenure Review 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 Management Science and Statistics Ph.D. Admissions Committee (member) 2006-present.

College of Business International Committee (member) 2009-present.

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 21st Century, International Biographical Centre, UK.

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

Honors, Awards and Recognition

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 37th 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 th 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," <i>Decision Sciences</i> , 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," <i>Management Science</i> , 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 Spring 2008 Spring 2009 Spring 2009	Faculty Development Leave, the University of Texas at San Antonio Pearson Business Statistics Forum, Hilton Head, SC, February 22-24, 2008 Faculty Development Leave, the University of Texas at San Antonio Pearson Business Statistics Forum, Boston, MS, March 6-8, 2009	
Grants		
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.	