AGHA IQBAL ALI

Department of Operations & Information Management
Isenberg School of Management, UMASS Amherst
Amherst, Massachusetts 01003
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EDUCATION:

Doctor of Philosophy in Operations Research, 1980
Southern Methodist University, Dallas, Texas
Dissertation: *Two Node-Routing Problems*

Master of Science in Operations Research, 1978
Southern Methodist University, Dallas, Texas

Master of Arts in Computer Science, 1976
Ball State University, Muncie, Indiana

Master of Science in Statistics, 1976
Ball State University, Muncie, Indiana
Thesis: *On the Approximation of Linear Integral Equations*

Master of Science (Part I) in Mathematics, 1973
University of Kashmir, Srinagar, Jammu & Kashmir, India

Bachelor of Science, 1970
University of Jammu and Kashmir, Srinagar, Jammu & Kashmir, India

RESEARCH INTERESTS:

Combinatorial and Network Optimization
Applications of Mathematical Programming Models
Supply Chain Management
Data Analytics & Performance evaluation
Data Envelopment Analysis

EXPERIENCE:

University of Massachusetts Amherst, Amherst, Massachusetts
Operations & Information Management Department,
    Karen and Chuck Peters Family Endowed Professor, since April 2019
    Professor, since Fall 1990
    Founding Chairman, Spring 2013—Spring 2018
Finance and Operations Management Department,
    Chairman, Fall 2006 – Fall 2012
    Professor, since Fall 1990
    Acting Chairman, Fall 1990.
    Associate Professor, 1987 - 1990.

University of Texas at Austin, Austin, Texas
Department of Management Science and Information Systems
    Associate Director for Informatics, Center for Cybernetic Studies, 1983 – 1987
    Assistant Professor of Operations Research and Information Systems, 1980 - 1987

RESEARCH:

Chapters in Books:

[1]   Agha Iqbal Ali, "Computational Aspects of Data Envelopment Analysis," *DEA: Theory, Methodology, and Applications*. Edt. Charnes, Cooper, Lewin, Seiford, Kluwer, pp 63-88, 1995.

[2]   Agha Iqbal Ali and L. Seiford, "The Mathematical Programming Approach to Efficiency Measurement," *The Measurement of Productive Efficiency: Techniques and Applications*, Edt. H. O. Fried, C. A. K. Lovell and S. S. Schmidt, Oxford, pp 120-159, 1993.

Refereed Publications:

[3]   Agha Iqbal Ali, R. Helgason, J. Kennington and H. Lall. "Primal Simplex Network Codes: State-of-the-Art Implementation Technology," *Networks*, Vol. 8, 315-339, 1978.

[4]   Agha Iqbal Ali, R. Helgason, J. Kennington and H. Lall. "Computational omparison Among Three Multicommodity Network Flow Algorithms," *Operations Research*, Vol. 28, No. 4, 995-1000, 1980.

[5]   Agha Iqbal Ali, et al. "Multicommodity Network Problems: Applications and Computations," *IIE Transactions*, Vol. 16, No. 2, 127-134, 1984.

[6]   Agha Iqbal Ali and J. L. Kennington. "The Asymmetric M-travelling Salesmen Problem: A Duality Based Branch-and-Bound Algorithm," *Discrete Applied Mathematics* 13, 259-276, 1986.

[7]   Agha Iqbal Ali, E. Allen, R. Barr and J. Kennington. "Reoptimization Procedures for Bounded Variable Primal Simplex Network Algorithms," *European Journal of Operational Research* Vol. 23, 256-263, 1986.

[8]   Agha Iqbal Ali, A. Charnes and T. Song. "A Two-Segment Approximation Algorithm for Separable Convex Programming with Linear Constraints." *Mathematische Operationsforschung und Statistik*, Series Optimization, Vol 17, No. 2, 147-159, 1986.

[9]   Agha Iqbal Ali, A. Charnes and and T. Song. "Design and Implementation of Data Structures for Generalized Networks," *Journal of Information and Optimization Sciences*, Vol 7, No. 2, 81-104, 1986.

[10]   Agha Iqbal Ali, W. Cook and M. Kress. "On the Minimum Violations Ranking of a Tournament," *Management Science*, Vol 32, No. 6, 660-672, 1986.

[11]   Agha Iqbal Ali, "An Efficient Algorithm for the Transshipment along a Single Road Problem," *Naval Research Logistics Quarterly*, Vol 33, No. 4, 673-684, 1986.

[12]   Agha Iqbal Ali, W. D. Cook and M. Kress. "Ordinal Ranking and Intensity of Preference: A Linear Programming Approach," *Management Science*, Vol 32, No. 12, 1642-1647, 1986.

[13]   Agha Iqbal Ali, R. Helgason and J. Kennington. "An Air Force Logistics Decision Support System Using Multi-commodity Network Models," *Annals of the Society of Logistics Engineers*, Vol. 1, No. 2, 93-104, 1987.

[14]   Agha Iqbal Ali, J. L. Kennington and B. Shetty. "The Equal Flow Problem," *European Journal of Operational Research*, Vol. 36, No. 1, 107-115, 1988.

[15]   Agha Iqbal Ali and C. Huang. "Graphical-Structure-Based Models for Routing Problems," *International Journal of Systems Science*, Vol. 19, No. 9, 1667-1686, 1988.

[16]   J. Ahmadi and Agha Iqbal Ali. "Integrated Production Scheduling in Large-Scale Flexible Electronic Parts Manufacturing," *Annals of Operations Research*, Vol. 15, 269-287, 1988.

[17]   Agha Iqbal Ali and H. Thiagarajan, "A Network Relaxation Based Enumeration Algorithm for Set Partitioning," *European Journal of Operational Research*, Vol. 38, No. 1, 76-85, 1989.

[18]   Agha Iqbal Ali, R. Padman and H. Thiagarajan, "Dual Algorithms for Pure Network Problems," *Operations Research*, Vol. 37, No. 1, 159-171, 1989.

[19]   Agha Iqbal Ali, A. Charnes, W. W. Cooper, D. Divine, Gerald A. Klopp, and J. Stutz. "An Application of Data Envelopment Analysis to Management of US Army Recruitment Districts." *In R. L. Schultz (Ed), Applications of Management Science, A Research Annual*, 1989.

[20]   Agha Iqbal Ali, "Data Envelopment Analysis: Computational Issues," *Computers, Environment and Urban Systems* Vol. 14, No. 2, 157-165, 1990.

[21]   Agha Iqbal Ali and L. M. Seiford. "Translation Invariance in Data Envelopment Analysis," *Operations Research Letters*, Vol. 9, No. 5, 403-405, 1990.

[22]   Agha Iqbal Ali, W. D. Cook and L. M. Seiford. "Strict vs Weak Ordinal Relations for Multipliers in Data Envelopment Analysis," *Management Science* Vol 37, No. 6, 733-738, 1991.

[23]   Agha Iqbal Ali and C. Huang. "Balanced Spanning Forests and Trees," *Networks*, Vol. 21, 667-687, 1991.

[24]   Agha Iqbal Ali, "Streamlined Computation for Data Envelopment Analysis," *European Journal of Operational Research* Vol. 64, No. 1, 61-67, 1993.

[25]   Agha Iqbal Ali, J. L. Kennington and T. T. Liang. "Assignment with En route Training of Navy Personnel," *Naval Research Logistics*, Vol. 40, 581-592, 1993.

[26]   Agha Iqbal Ali, C. Lerme and R. Nakosteen. "Assessment of Intergovernmental Revenue Transfers," *Socio-Economic Planning Science* Vol. 27, No. 2, 109-118, 1993.

[27]   Agha Iqbal Ali and L. M. Seiford. "Computational Accuracy and Infinitisimals in Data Envelopment Analysis," *Information Systems and Operational Research*, Vol. 31, No. 4, 290-297, 1993.

[28]   Agha Iqbal Ali, C. Lerme and L. Seiford. "Components of Efficiency Evaluation in Data Envelopment Analysis Models," *European Journal of Operational Research*, Vol. 80, No. 3, 462-473, 1995.

[29]   Agha Iqbal Ali and S. Shmerling. "Incorporating Facet-Inducing Inequalities into Graphical-Construct-Based Lagrangean Relaxation Methodologies," *Operations Research Letters*, Vol 18, 177-184, 1996.

[30]   Agha Iqbal Ali and C. S. Lerme. "Comparative Advantage and Disadvantage in DEA," *Annals of Operations Research* Vol. 73, 215-232, 1997.

[31]   Agha Iqbal Ali and H. Han. "Computational Implementation of Fujishige's Graph Realizability Algorithm," *European Journal of Operational Research*, Vol. 108, 452-463, 1997.

[32]   Agha Iqbal Ali, T. Blanco and B. Buclatin. "Goal Network Programs: A Specialized Algorithm and an Application," *European Journal of Operational Research*, Vol. 106, 191-197, 1998.

[33]   Agha Iqbal Ali and M. Bhargava. "Marketing Capability and Performance of Dairy Cooperatives in India," *INFOR*, Vol. 36, No. 3, August 1998.

[34]   Agha Iqbal Ali and H. Han. "Reformulation of the Set Partitioning Problem as a Pure Network with Special Order Set Constraints," *Annals of Operations Research* Vol. 81, 233-249, 1998.

[35]   Agha Iqbal Ali and D. Gstach. "The impact of deregulation during 1990-1997 on Banking in Austria," *Empirica*, 27, 265-281, 2000.

[36]   Y. Chen and Agha Iqbal Ali. "Output-Input Ratio Analysis and DEA Frontier," *European Journal of Operational Research*, 142, 4766-479, 2002.

[37]   Y. Chen and Agha Iqbal Ali. "DEA Malmquist Productivity Measure: New Insights with An Application to the Computer Industry", *European Journal of Operational Research*, Volume 159, Issue 1, 16 , Pages 239-249, November 2004.

[38]   Agha Iqbal Ali and R. Nakosteen. "Ranking Industry Performance in the U.S.," *Socio-Economic Planning Sciences*, 39, pp 11-24, 2005.

[39]   Agha Iqbal Ali and Y. Chen. "Extending Data Envelopment Analysis to Comparative Performance Assessment", *Empirical Economics Letters*, Vol 8, 2009 pp 191 – 211.

[40]   Agha Iqbal Ali and Debra J. O'Connor. "The Impact of Distribution System Characteristics on Computational Tractability", *European Journal of Operational Research*, Volume 200, pp 323-333, 2010.

[41]   Agha Iqbal Ali, Donald Vance and Senay Solak, "Pure Network Based Procedures for Constrained Assignment Models in Naval Personnel Planning", *Military Operations Research*, Vol 15, pp 27-37, 2010.

[42]   Agha Iqbal Ali and Debra J. O'Connor. "Using truck-inventory-cost to obtain solutions to multi-period logistics models", *International Journal of Production Economics*, Vol 143 (1), pp 1544-150, May 2013.

[43]   Agha Iqbal Ali, Ahmed Ghoniem, and Alex Franke. "Evaluating Capacity Management Tactics for a Legacy Manufacturing Plant", *Journal of the Operational Research Society*, Vol 65, pp 1361-1370, July 2013.

[44]   Agha Iqbal Ali and Debra O'Connor. "Using Predetermined Partial Solutions For Solving a Heterogeneous Truck Fleet Distribution Model", *International Journal of Planning and Scheduling*, Vol 2, No. 1, pp. 1-13, 2014.

[45]   Agha Iqbal Ali and Guven Ince. "Distress among disaster-affected populations: delay in relief provision", *Journal of the Operational Research Society, 68(5), 533-543,* 2017. (doi:10.1057/s41274-016-0015-4).

[46]   Ahmed Ghoniem, Agha Iqbal Ali, Mohammed Al-Salem, Wael Khallouli. "Prescriptive analytics for FIFA World Cup lodging capacity planning", *Journal of the Operational Research Society,* 68(10) 1183-1194, 2017. (doi:10.1057/s41274-016-0143-x)

Refereed Proceedings:

[47]   Agha Iqbal Ali, H. Han and J. L. Kennington. "Use of Hidden Network Structure in the Set Partitioning Problem," *Integer Programming and Combinatorial Optimization*, Edt. Egon Balas and Jens Clausen, Springer-Verlag, pp 172-184, 1995.

[48]   Agha Iqbal Ali and J. Ahmadi. "A Decision Support System for Production Planning in Discrete Electronic Parts Manufacturing," P*roceedings of the Second ORSA/TIMS Conference on Flexible Manufacturing Systems: Operations Research Models and Applications*, 345-358, Elsevier, August 1986.

Accepted for Publication:

[49]   Agha Iqbal Ali and H. Thiagarajan. "Heuristics for Finding Network Substructure in Matrices with Entries of 0, ±1," *Annals of the Society of Logistics Engineers* Vol. xx, No. xx, xxx-xxx, 199x.

Submitted for Publication:

[50]   Agha Iqbal Ali, Ahmed Ghoniem. "Facilitating Improved Sporting Legacy of FIFA World Cups: Eight-Stadium Schedules," submitted for publication.

Under Revision for Publication:

[51]   Agha Iqbal Ali and Baris Hasdemir, "Enabling Easy Consumer Access to Services and Products", submitted for publication, May 2010.

[52]   Agha Iqbal Ali and Baris Hasdemir. Restructuring Services with Visibility of Consumer Access, submitted for publication, August, 2011.

[53]   Agha Iqbal Ali and Milad Ebtehaj. "Pallet-In-Pallet-Out Through-Store-Transshipment: A Distribution Practice for Retail Demand Fulfillment", submitted for publication, August, 2011.

Working Papers to be submitted for publication:

[54]   Agha Iqbal Ali and Guven Ince, "Identifying Points of Supply and Consolidation for Effective Provision of Relief Supplies Using Uncongested Transport Links", 2014

[55]   Agha Iqbal Ali, "Infrastructural and Operational Effectiveness of Banks in India 2006-2016", (Presented at the ORS Annual Meeting, 9/4/19, Canterbury, England).

Research and Technical Reports:

[56]   Agha Iqbal Ali, "Improvements in the Resource Directive Decomposition Algorithm for Networks with Side Constraints," Working Paper, Department of General Business and Finance, University of Massachusetts Amherst, Amherst, MA.

[57]   Agha Iqbal Ali, "Dual Algorithms for Embedded Network Problems", Working Paper, Department of Finance and Operations Management, University of Massachusetts Amherst, Amherst, MA.

[58]   Agha Iqbal Ali and C. Huang, "The Balanced m-Travelling Salesmen Problem," Working Paper 86/87-3-12, Department of Management Science and Information Systems, UT Austin, July, 1987.

[59]   Agha Iqbal Ali and Hyun-Soo Han, "A Graphical-Construct-Based Algorithm for Optimal Solutions to a Lagrangean Dual of the Hamiltonian Path Problem," Working Paper, Department of Finance and Operations Management, UMASS Amherst (with Shirley Shmerling). September 1993.

[60]   Agha Iqbal Ali and "Extracting Hidden Network Submatrices of a (0, 1) Matrix Using a PQ-graph," Working Paper, Department of Finance and Operations Management, UMASS Amherst, March 1994.

[61]   Agha Iqbal Ali, Hyun-Soo Han and J. L. Kennington, "Use of Hidden Network Structure in the Set Partitioning Problem," Working Paper, Department of Finance and Operations Management, UMASS Amherst, August 1994.

[62]   Agha Iqbal Ali and H. Thiagarajan, "Realizable Matrices with Entries of 0, ±1: An Algorithmic Development," August 1988, (Revision of Working Paper 86/87-3-4, Department of General Business, University of Texas at Austin, September, 1986).

[63]   Agha Iqbal Ali and Shirley Shmerling, "Algorithmic Constructs for Solution of A Sequence of

Spanning Tree Problems," Working Paper, Department of Finance and Operations Management, UMASS Amherst.

[64]   Agha Iqbal Ali and Catherine S. Lerme, "Determination of Comparative Advantage for the Economy of States in the U.S," Working Paper, Department of Finance and Operations Management, UMASS Amherst.

[65]   Agha Iqbal Ali, "Computational Aspects of Data Envelopment Analysis," Working Paper, Department of General Business and Finance, UMASS Amherst. (Presented in Austin Texas at the NSF conference on New Uses in DEA in Management, September, 1989)

[66]   Agha Iqbal Ali and T. Mallik, "Application of Modified Subgradient Optimization," Working Paper, Department of Finance and Operations Management, UMASS Amherst, February, 1988.

[67]   Agha Iqbal Ali, "Models for Classification of Air Force Recruits into Air Force Specialties," Working Paper, August, 1987.

[68]   Agha Iqbal Ali, R. Padman and H. Thiagarajan, "The Dual Algorithm for Network Problems: A Computational Study," Working Paper 85/86-3-3, Department of General Business, UT Austin, March 1986.

[69]   Agha Iqbal Ali, R. Padman and H. Thiagarajan, "Dual Simplex-Based Reoptimization Procedures for Network Problems," Working Paper 85/86-3-4, Department of General Business, University of Texas at Austin, April 1986.

[70]   Agha Iqbal Ali, "An Extension of the Fibonacci Series Applied to a Replenishment Problem," Research Report CCS547, Center for Cybernetic Studies, University of Texas at Austin, July, 1986.

[71]   Agha Iqbal Ali and B. Schmeiser, "The n-Dimensional Polar Method for Generating Pseudo-Random Normal Deviates," Technical Report IEOR 77011, Department of Industrial Engineering and Operations Research, Southern Methodist University, Dallas, Texas, June 1977.

[72]   Agha Iqbal Ali, R. Helgason and J. Kennington, "The Convex Cost Network Flow Problem: A Survey of Algorithms," Technical Report OREM 78001, Department of Operations Research and Engineering Management, Southern Methodist University, Dallas, Texas, January, 1978.

[73]   Agha Iqbal Ali and J. Kennington, "Network Structure in Linear Programs: A Computational Study," Technical Report 83-OR-1, Department of Operations Research and Engineering Management, Southern Methodist University, Dallas, Texas, December, 1983.

Documentation of Software

[74]   Agha Iqbal Ali and J. Kennington, "SMU-LP: An In-Core Primal Simplex Code for Solving Linear Programs," Technical Report OR 80015, Department of Operations Research, Southern Methodist University, Dallas, Texas, October, 1978.

[75]   Agha Iqbal Ali, A. Bessent, W. Bessent, and J. Kennington, "Data Envelopment Analysis of the Efficiency of Decision Making Units with the DEA3 Code," Research Report EPC001, Educational Productivity Council, University of Texas at Austin, February 1982, (with).

[76]   Agha Iqbal Ali and J. Kennington, "MNETGN Program Documentation," Technical Report IEOR 77003, Department of Industrial Engineering and Operations Research, Southern Methodist University, Dallas, Texas, February, 1977.

[77]   Agha Iqbal Ali and J. Kennington, "NETFLO User's Guide," Technical Report, Department of Finance and Operations Management, University of Massachusetts at Amherst, November 1988.

[78] Agha Iqbal Ali and J. Kennington, "MODFLO User's Guide," Technical Report, Department of Finance and Operations Management, University of Massachusetts at Amherst, January 1989.

[79] Agha Iqbal Ali, "MODAPT User's Guide," Technical Report, Department of Finance and Operations Management, University of Massachusetts Amherst, January, 1989.

RECENT PROFESSIONAL PRESENTATIONS: (List suppressed)

Agha Iqbal Ali, Ahmed Ghoniem, and Alex Franke. "Evaluating Capacity Management Tactics for a Legacy Manufacturing Plant", Raytheon Manufacturing Technology Network Symposium, October 2013.

Agha Iqbal Ali, "International Supply Chains: Building Infrastructure," University of Kashmir, August 2011

Agha Iqbal Ali and Baris Hasdemir, "Mitigating the Impact of Reductions in USPS Infrastructure and Services," INFORMS Charlotte, Nov 13-16 2011

Agha Iqbal Ali and Milad Ebtehaj, "Through-Store-Transshipment: A Distribution Practice for Retail Full Pallet Demand Fulfillment," INFORMS Charlotte, Nov 13-16 2011

Agha Iqbal Ali and Debra O'Connor, "Restructuring a Logistics Network: Right-sizing System Capacity," INFORMS Regional Conference, Amherst, MA, May 6-7 2011

Agha Iqbal Ali and Baris Hasdemir, "Enabling Easy Consumer Access to Services and Products," INFORMS Regional Conference, Amherst, MA, May 6-7 2011

Agha Iqbal Ali and Guven Ince, "Quantifying Trade-Offs Between Multiple Objectives in Complex Decision Making," INFORMS Regional Conference, Amherst, MA, May 6-7 2011

Agha Iqbal Ali and Milad Ebtehaj, "Dynamic Distribution network Configuration using Tree-diameter Constrained Spanning Forests," INFORMS Regional Conference, Amherst, MA, May 6-7 2011

Agha Iqbal Ali, Alex Franke, Ahmed Ghoniem. "Using Optimization Models to Evaluate Legacy Plant Restructuring Decisions," Production and Operations Management Society 22nd Annual Conference, Reno, Nevada, April 29-May 2, 2011.

Agha Iqbal Ali and Debra O'Connor, "Improving Computational Tractability of Logistics Models Using Cost-Structure Trade-Offs," INFORMS Austin, Nov 7-10 2010.

Agha Iqbal Ali and Milad Ebtehaj, "Vendor Managed Logistics: Dynamic Consolidation of Supplier Pallet Shipments," INFORMS Austin, Nov 7-10 2010.

Agha Iqbal Ali and Baris Hasdemir, "Enabling Easy Consumer Access to Services and Products," INFORMS Austin, Nov 7-10 2010.

Agha Iqbal Ali and Debra O'Connor, "Transportation and Inventory Trade-offs in Multiperiod Distribution System Models," INFORMS San Diego, Oct 11-14 2009.

Agha Iqbal Ali and Milad Ebtehaj, "Matching Line Haul Truck Capacity to Customer Demand Using Dynamic Transfer Points," INFORMS San Diego, Oct 11-14 2009.

Agha Iqbal Ali and Baris Hasdemir, "Providing Services to the World: Optimizing with Respect to

Multiple Concentric Zones of Population," INFORMS San Diego, Oct 11-14 2009.

Agha Iqbal Ali and Shenghan Xu, "The Impact of Product Characteristics on Post-Merger Supply Chain Synergy," INFORMS Washington DC, Oct 12-15 2008.

Agha Iqbal Ali and Baris Hasdemir, "The Impact of Urbanization and Population Shifts on Supply Chain Infrastructure and Configuration," INFORMS Washington DC, Oct 12-15 2008.

Agha Iqbal Ali and Debra O'Connor, "The Impact of Vehicle Characteristics on Multi-Model Distribution Systems," INFORMS Washington DC, Oct 12-15 2008.

Agha Iqbal Ali and Debra O'Connor, "Characteristics of Distribution Systems," INFORMS International Puerto Rico, July 8-11 2007.

Agha Iqbal Ali and Shenghan Xu, "Post-Merger Supply Chain Coordination: The Impact of Market Regions and Distribution Configurations," INFORMS Seattle, Nov 4-7 2007.

Agha Iqbal Ali and Debra O'Connor, "The Impact of Distribution System Characteristics," INFORMS Pittsburgh, Nov 5-8 2006.

RECENT PROFESSIONAL ACTIVITIES: (Detailed list suppressed)

Annual Association of Chairs of Operations Research Departments (ACORD) Meeting, INFORMS Charlotte, Nov 13-16 2011; INFORMS Austin, Nov 7-10 2010; INFORMS San Diego, Oct 11-14 2009; INFORMS Washington DC, Oct 12-15 2008; INFORMS Seattle Nov 4-7 2007.

Panelist, "Panel Discussion: Academic Job Search," INFORMS Charlotte, Nov 13-16 2011

Session Chair, "Logistics in Supply Chains," INFORMS Washington DC, Oct 12-15 2008.

Session Chair, "Public Section Infrastructure: Development and Restructuring," INFORMS Regional Conference, Amherst, MA, May 6-7 2011

Mathematical Programming Software Developed (List suppressed)

HONORS:

> *Goodeve Medal 2018, The Operational Research Society, November 28, 2018.*
> *Excellence in Teaching Award*, Graduate Business Association, Isenberg School of
>   Management UMASS Amherst, December 2005.
> *Excellence in Teaching Award*, Graduate Business Association, Isenberg School of
>   Management UMASS Amherst, December 2004.
> *College Outstanding Teacher Award*, Isenberg School of Management, University of
>   Massachusetts Amherst, 1999-2000.
> *College of Business Administration Foundation Advisory Council Award for Assistant
>   Professors*, University of Texas at Austin, 1985.
> Nominated for *Beasley Award for Graduate Teaching*, Graduate School of Business,
>   University of Texas at Austin, 1984.

Outstanding Graduate Business Professor, Graduate School of Business, University of
    Texas at
    Austin, 1983
Nominated for *Outstanding Graduate Business Professor*, Graduate School of Business,
    University of Texas at Austin, 1980-1985.
Member of *Omega Rho*
Academic Honors, Southern Methodist University, 1979.
Frederick E. Terman Award for Academic Excellence, Southern Methodist University,
    1979.
Academic Honors, Southern Methodist University, 1978.

ACADEMIC:

Graduate Courses Taught:

Supply Chain Management; Production and Operations Management; Management Science I &
II; Deterministic Models; Introduction to Operations Research; Linear Programming; Integer
Programming; Computational Aspects of Optimization; Large-Scale Systems

Undergraduate Courses Taught:

Introduction to Production and Operations Management; Business Process Optimization;
Management Science Models in Production and Operations Management; Advanced Topics in
Production and Operations Management; Business Process Optimization; Supply Chain
Management; Introduction to Electronic Data Processing; Elementary Business Statistics

Chairman of Ph. D. Committee:

University of Texas at Austin Dissertation: *Implementation and Study of the Effect of
    Conjugacy in Subgradient Optimization*, Tapan Mallik, August, 1985.
University of Texas at Austin Dissertation: *Network Realizability of Binary and Ternary
    Matrices: Theory, Algorithms and Applications*, Hemalatha Thiagarajan, August, 1986.
University of Texas at Austin Dissertation: *Optimization Problems of Flexible Assembly
    Systems in Large Scale Electronic Parts Manufacturing*, Javad Ahmadi, December,
    1986.
University of Texas at Austin Dissertation: *Graphical Constructs for Balanced Routing
    Problems*, Chung Hsing Huang, July, 1987.
University of Massachusetts Amherst Dissertation: *Efficiency and Frontier Analysis and
    Extension to Strategic Management*, Catherine S. Lerme, September 1992.
University of Massachusetts Amherst Dissertation: *Synthesis of Lagrangean Relaxation and
    Polyhedral Theory for the Solution of Routing Problems*, Shirley Shmerling, May 1994.
University of Massachusetts Amherst Dissertation: *Algorithms to Extract Hidden Networks
    and Applications to Set Partitioning Problems*, Hyun Soo Han, September 1994.
University of Massachusetts Amherst Dissertation: *Productivity and Data Envelopment
    Analysis*, Yao Chen, 2001.
University of Massachusetts Amherst Dissertation: "Valid Inequalities for Multi-Period, Multi-
    Modal Supply Chain Models, Debra O'Connor, December, 2005.
University of Massachusetts Amherst Dissertation: *Quantifying and Revealing Supply Chain
    Synergy in Mergers and Acquisitions*, Shenghan Xu, August, 2007.
University of Massachusetts Amherst Dissertation: *Topics in Multivariate Time Series Analysis
    – Statistical Control, Dimension Reduction, Visualization and Their Business Applications*,

Xuan Huang, February, 2010.

University of Massachusetts Amherst Dissertation: *Topics in Univariate Time Series Analysis with Business Applications*, Davit Khachatryan, July, 2010.

University of Massachusetts Amherst Dissertation: *Enabling Easy Consumer Access to Services and Products*, Baris Hasdemir, April, 2012.

University of Massachusetts Amherst Dissertation: *Two Distribution Tactics For Retail Demand Fulfillment*, Milad Ebtehaj, December, 2012.

University of Massachusetts Amherst Dissertation: *Resource and Supply Allocation and Relief Center Location for Humanitarian Logistics*, Guven Ince, August, 2014.

MBA Professional Reports Directed: (List suppressed)

Member of Ph.D. Committees: (List suppressed)