

## SRIDHAR NARASIMHAN

VITA  
September 2007

### Present Position

Senior Associate Dean,  
Professor, Information Technology Management,  
College of Management, Georgia Institute of Technology, Atlanta, GA.

### Office Address

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### Education

- Ph.D. Business Administration, The Ohio State University, August 1987.  
Thesis: *Topological Design of Networks for Data Communication Systems*.  
Thesis Advisors: David A. Schilling and Hasan Pirkul.
- M.S. Computers and Information Systems, University of Rochester, 1983.
- M.B.A. Indian Institute of Management, Bangalore, India, 1981.
- B.E. Electrical and Electronics Engineering, (Honors),  
Birla Institute of Technology and Science, Pilani, India, 1977.

### Employment

Professor: College of Management of Management, Georgia Tech, (with tenure), Fall 2001 –

Associate Professor: College of Management of Management, Georgia Tech, (with tenure), Fall 1993 – Spring 2001

Assistant Professor: School of Management, Georgia Tech, Fall 1987 – Spring 1993

Teaching Associate: Taught at the Computer & Information Science Department, The Ohio State University from April 1984 to August 1986.  
Taught at the Graduate School of Management, University of Rochester from July 1982 to March 1984.

Systems Officer: DCM Data Products, New Delhi, India. The job involved studying user requirements for data processing applications, preparing sales proposals, installing applications and training of customer personnel for data processing (July 1977 – June 1979).

### **Current Fields of Interest**

- (i) Topological Design of Computer Networks
- (ii) Distributed Database Design
- (iii) Information Systems Outsourcing
- (iv) Electronic Commerce

### **Grants, Sponsored Research, & Other Fund Raising**

1. **Distributed computer-supported teamwork**  
Joint Proposal with Charles K. Parsons (co-Principal Investigator)  
U.S. Army/AIRMICS  
Amount Requested: \$113,641, July 1989  
Result: Funded \$113,641 (7/17/1989 – 10/27/1989)
2. **Knowledge Based Task Assignment in a Smart Card Based Manufacturing Cell**  
Joint Proposal with S. Manivannan and C. Zhou (co-Principal Investigators)  
CIMS: Georgia Tech  
Amount Requested: One Graduate Student Support, May 1991  
Result: Funded (9/91 – 8/92)
3. **Smart Card Based Manufacturing System**  
Joint Proposal with S. Manivannan and C. Zhou (co-Principal Investigators)  
Material Handling Research Center/Georgia Tech  
Amount Requested: \$113,250, May 1992  
Result: Funded \$91,327 (9/92 – 8/93)
4. **A Decision Support System for Smart Card Based Manufacturing**  
Joint Proposal with C. Zhou and E. Malstrom (co-Principal Investigators)  
Material Handling Research Center/Georgia Tech  
Amount Requested: \$150,000, May 1993  
Result: Funded: \$125,000 (9/93 - 8/94)

5. **A Study of the Impact of Telecommuting on firms in the Atlanta Area Phase I**  
Joint Proposal with H. Rhee  
Georgia Department of Natural Resources  
Amount Requested; \$17,517 Nov. 1993  
Result: Funded (1/94 - 7/94)
6. **Smart Card Applications in Warehousing and Distribution Systems**  
Joint Proposal with C. Zhou (co-Principal Investigators)  
Material Handling Research Center/Georgia Tech  
Amount Requested: \$150,000, May 1994  
Result: Funded: \$125,000 (9/94 - 8/95)
7. **An Engineering Approach to the Design of Business Processes**  
Seed Money for Interdisciplinary Project Proposal – Georgia Tech  
Joint Proposal with G. Tjaden (co-Principal Investigators)  
Amount Requested: \$19,651.00, June 1995  
Result: Funded (8/95 - 6/96)
8. **Information Technology and Entrepreneurship**  
DuPree Center for Entrepreneurship -- Course Development Grant  
Joint Proposal with H.S. Rhee and B.Toney  
Amount Requested: \$9,000, February 1996  
Result: Funded (7/96-9/96)
9. **Richard Speer Computer Grant**  
Chaired a Committee which sent a Proposal to Mr. Richard Speer to improve the Graduate and Undergraduate Computing Environment of the School of Management, Spring 1996  
Result: Funded: \$40,000
10. **SERBIS (Senior Executives Roundtable on Information Systems), 1994 -.**  
Founding Member with Gary Tjaden, S. Navathe, S. Mitra. This roundtable is designed for senior executives facing IT related issues.  
Annual Funding: \$50,000
11. **Enterprise Integration Lab**  
HP Instructional Equipment Grant Application  
Joint Proposal with S. Mitra and S. Ghosh  
Amount Requested: \$184,201.00, September 1997  
Result: Funded: \$118,000.00, December 1997
12. **Workshop on Information Technology and Systems (WITS-97)**

- Atlanta, GA, Dec. 1997  
Corporate Sponsorship for WITS-97  
Amount Funded: \$5,000.00  
(from Equifax, HBO & Company, Scientific Atlanta)
13. **SAP America**  
New Techniques to Justify IT Investments/Teaching Enterprise Integration Systems  
Joint Proposal with S. Mitra and S. Ghosh  
Amount Requested: \$100,000.00 (December 1997)  
Result: Funded: \$75,000.00 (January 1998)
14. **iXL Center for Electronic Commerce**  
Established a Center for Electronic Commerce at Georgia Tech  
Joint Effort with A. Datta, F. Riggins, F. Allvine  
Amount Requested: \$5,000,000.00 (endowed center)  
Result: Funding Obtained -- \$1,000,000 over a 5-year period
15. **Information Technology Management Partnership**  
Executive Education Program (developed with S. Mitra)  
Total Revenues: \$900,000 Fall 1997 – Spring 2000
16. **Electronic Commerce Lab**  
HP Instructional Equipment Grant Application  
Joint Proposal with A. Datta and F. Riggins  
Amount Requested: \$337,182, January 2000  
Result: Funded: \$337,182, March 2000
17. **SAP America**  
Three Innovative Metrics of ROI for Enterprise Systems: Business Process, Human Capital, and Long-Run Impact  
Joint Proposal with D.J. Wu, S. Mitra, and R. Dai  
Amount Requested: \$75,000.00 (December 2003)
18. **SAP America**  
Business Models for Business Process Offshoring Outsourcing: A Cross-Country Study of China, India and US  
Joint Proposal with D.J. Wu, S. Mitra, and R. Dai  
Amount Requested: \$75,000.00 (December 2003)  
Result: Not Funded
19. **Procuri**  
Efficient Purchasing Process  
Joint Proposal with D.J. Wu and R. Dai  
Amount Requested: \$50,000 (January 2005)

Result: Not Funded

**20. IT Management Program**

(Developed and Directed with S. Mitra)

Fall 2006 Version: ~ \$160,000

From 1997 -- 2003 this program generated over \$1.5MM in revenues

**Refereed Journal Publications**

1. "Efficient Algorithms for the Multiconstraint General Knapsack Problem," (with H. Pirkul), *IIE Transactions*, Vol. 18, no. 2, pp. 195-203, 1986.
2. "Firm Expansion through Franchising: A Model and Solution Procedures," (with H. Pirkul and P. De), *Decision Sciences*, Vol. 18, no. 4, pp. 631-645, 1987.
3. "Bin Packing Problems in One Dimension: Heuristic Solutions and Confidence Intervals," (with N. Hall, S. Ghosh, R. Kankey, and W. Rhee), *Computers and Operations Research*, Vol. 15, no. 2, pp. 171-177, 1988.
4. "Locating Concentrators for Primary and Secondary Coverage in a Computer Communications Network," (with H. Pirkul and P. De), *IEEE Transactions on Communications*, Vol. 36, no. 4, pp. 450-458, 1988.
5. "Route Selection in Backbone Data Communication Networks," (with H. Pirkul and P. De), *Computer Networks and ISDN Systems*, Vol. 15, pp. 121-133, 1988.
6. "An Assignment Problem with Queueing Costs," (with S. Agnihotri and H. Pirkul), *Naval Research Logistics*, Vol. 37, no. 2, pp. 231-244, April 1990.
7. "The Concentrator Location Problem with Variable Coverage," *Computer Networks and ISDN Systems*, Vol. 19, pp. 1-10, 1990.
8. "The Hierarchical Concentrator Location Problem," (with H. Pirkul), *Computer Communications*, Vol. 15, no. 3, pp. 185-191, April 1992.
9. "Capacitated Emergency Facility Siting with Multiple Levels of Backup," (with H. Pirkul and D. Schilling), *Annals of Operations Research*, Vol. 40, pp. 323-337, 1992.
10. "Primary and Secondary Route Selection in Backbone Networks," (with H. Pirkul), *ORSA Journal on Computing*, Vol. 6, no. 1, pp. 50 -60, 1994.
11. "Topological Expansion of Metropolitan Area Networks," (with L.J. LeBlanc), *Computer Networks and ISDN Systems*, Vol. 26, pp. 1235-1248, 1994.

12. "Locating Concentrators in a Computer Network with Multiple Coverage for Terminals," *Computer Communications*, Vol. 17, no. 2, pp.94-102, February 1994.
13. "Database Allocation in a Distributed Environment - incorporating a Concurrency Control Mechanism and Queuing Costs," (with S. Ram), *Management Science*, Vol. 40, no. 8, pp. 969-983, August 1994.
14. "Incorporating the Majority Consensus Concurrency Control Mechanism into the Database Allocation Problem," (with S. Ram), *ORSA Journal on Computing* Vol. 7, no. 3, pp. 244-256, Summer 1995.
15. "Toward a Telework Taxonomy and Test for Suitability: A Synthesis of the Literature," (with M.E.W. Fritz and K. Higa), *Group Decision and Negotiation*, Vol. 4, pp. 311-334, 1995.
16. "Database Allocation in Distributed Databases, Incorporating the Central Node Concurrency Control Mechanism," (with S. Ram), *Journal of Database Management* (to appear).
17. "Offshore Outsourcing of Software Development and Maintenance: A Framework for Research," (with M. A. Smith and S. Mitra), *Information and Management*, Vol. 31, pp. 165-175. 1996.
18. "Communication and Coordination in the Virtual Office," (with M. E. W. Fritz and H. Rhee), *Journal of Management Information Systems*, Vol. 14, No. 4, pp. 7 – 28. Spring 1998
19. "Information Systems Outsourcing: A Study of Pre-Event Firm Characteristics," (with M. A. Smith and S. Mitra), *Journal of Management Information Systems*, Vol. 15, No. 2, 61 – 93, Fall 1998.
20. "Exploratory Analysis of Factors Influencing Performance Dynamics of Telecommuters and Traditional Office Workers," (with M. E. W. Fritz and S. Piramuthu), *IEEE Transactions on Systems, Man, and Cybernetics*, Vol. 30, No 2, pp. 239-251, May 2000.
21. "Secure Data Delivery Protocols for Information Commerce in a Push-based Environment," (with A. Celik and A. Datta), *IEEE Transactions on Systems, Man and Cybernetics* July 2000, Volume 30, Number 04, pp 433-445.
22. "Planning Models for Wide-Area Communication Network Design with Response-Time-Dependent Offered Traffic," (with L.J. LeBlanc and B. Ran), *Information Technology & Management Journal*, July 2002, Vol. 3, No 3, pp 229-245

23. S. Soni, S. Narasimhan, and L. J. LeBlanc, "Telecommunication Access Network Design with Reliability Constraints," *IEEE Transactions on Reliability*, v 53, n 4, Dec. 2004, pp 532-41.
24. J. Son, S. Narasimhan, and F. Riggins, "Effects of EDI-Specific Relational Factors and Channel Climate on EDI Usage in the Customer-Supplier Relationship," *Journal of Management Information Systems*, Vol. 22, No 1, Summer 2005, pp 321-351.
25. J. Son, N. Kim, F. Riggins, and S. Narasimhan, "Understanding the development of IOS-based trading partner relationships," *Journal of Organizational Computing & Electronic Commerce*, (to appear).
26. R. Dai, S. Narasimhan, D. J. Wu, "Buyer's Efficient E-Sourcing Structure: Centralize or Decentralize," *Journal of Management Information Systems*, Vol. 22, No 2, Fall 2005.
27. S. Kim, N. Malhotra, S. Narasimhan, "Conscious Behavior and Automaticity in Web-based IS Use: An Integrated Goal-Action Model (IGAM)," *Information Systems Research* Vol. 16, No 4, December 2005.
28. S. Narasimhan, S. Soni, and S. H. Song, "ATM Network Design for Corporate Networks," *European Journal of Operations Research*, Volume 170, Issue 2, 16 April 2006, Pages 644-663.
29. K. Dutta, S. Soni, S. Narasimhan, and A. Datta, "Optimization in Object Caching," *INFORMS Journal on Computing*, Vol. 18, No. 2, Spring 2006, pp 243-254.

### **Refereed Conference Proceedings**

1. "PSROUTE: An Interactive Design Tool for Selecting Routes in Data Communication Networks," (with H. Pirkul), *Proceedings of the Eighth Annual International Conference on Information Systems*, Pittsburgh, December 1987, pp. 264-276.
2. "The Hierarchical Concentrator Location Problem," (with H. Pirkul), *1st ORSA SIG in Telecommunications Conference*, Boca Raton, March 1990.
3. "Allocation of Databases in Distributed Database Systems," (with S. Ram), *Proceedings of the Eleventh Annual International Conference on Information Systems*, Copenhagen, December 1990, pp. 215-230.
4. "Metropolitan Area Network Design," (with L.J. LeBlanc), *2nd ORSA SIG in Telecommunications Conference*, Boca Raton, March 1992.

5. "Design of a Smart Card-Based Manufacturing System," (with S. Manivannan, C. Zhou, and S. Bullington), *1992 Winter Simulation Conference*, Washington, D.C., December 1992.
6. "File Allocation on Interconnected LANs," (with J. Park), *1st Telecommunications Systems Conference*, Nashville, February/March 1993.
7. "Telework: Exploring the Borderless Office," (with M.E.W. Fritz and K. Higa), *Proceedings of the Twenty-Seventh Annual Hawaii International Conference on System Sciences (HICSS)*, Maui, Hawaii, January 1994, Vol. 4, pp. 149-158.
8. "Network Design with Topology-Dependent Subscriber Demand," (with L.J. LeBlanc), *2nd Telecommunications Systems Conference*, Nashville, March 1994.
9. "A Model for Designing ATM Networks," (with S. Mitra), *3rd INFORMS SIG in Telecommunications Conference*, Boca Raton, March 1995.
10. "The Impact of Telecommuting on Informal Organizational Communication," (with M. E. W. Fritz and H. Rhee), *Telecommuting '96*, Jacksonville, Florida, April 25-26, 1996.
11. "Structural Effectiveness Metrics for Business Processes," (with G. S. Tjaden and S. Mitra) *Proceedings of the INFORMS Conference on Information Systems and Technology*, May 5-8, 1996, Washington, DC, pp. 396-400.
12. "Routing in Wide-Area Communication Networks with Response-Time-Dependent Offered Traffic," (with L.J. LeBlanc and Bin Ran), *5th International Conference on Telecommunication Systems*, Nashville, March 1997.
13. "Factors Affecting the Extent of Electronic Cooperation between Firms: Economic and Sociological Perspectives," (with J. Son and F. Riggins), *Twentieth Annual International Conference on Information Systems (ICIS)*, Charlotte, December 1999.
14. "ATM Network Design for Client-Server Architectures," (with S. Soni, and S. H. Song), *9<sup>th</sup> International Conference on Telecommunication Systems*, Dallas, Texas, March 2001, pp. 174 - 185.
15. "Optimization approaches for accelerating dynamic content in E-business," (with K. Dutta, H. Thomas, A. Datta, and S. Soni) *2001 IEEE International Conference on Systems, Man and Cybernetics. e-Systems and e-Man for Cybernetics in Cyberspace (Cat.No.01CH37236)*, 2001, pt. 5, p 3032 vol.5.

16. "Optimal Capacity Expansion of Next-Generation Wireless Base Station Subsystems," (with R.C. Basole and S. Soni), Eighth Annual Informs Conference on Information Systems and Technology, October 2003, Atlanta, Georgia.
17. "Two-Layered Location Registration and Paging Areas Partitioning Problem in Mobile Communication Networks," (with C. H. Paik and S.Soni), 7<sup>th</sup> *INFORMS Telecommunications Conference*, Boca Raton, March 2004.
18. "Internet Auction Equilibrium Selection: Theory, Evidence, and Impact of Strategic Bidding Behavior," (with F. Zhong, D.J. Wu, and H. Zhang), *Workshop on Information Systems & Economics WISE 2004*, Washington, DC, December 2004.
19. "E-Sourcing: Buyer's Efficient Structure for Purchasing Preparation Process", (with R. Dai and D.J. Wu), *Hawaii International Conference on System Sciences*, HICSS-38, January 2005.
20. Z. Qu, S. Narasimhan, D.J. Wu, "An empirical model of advance purchasing pattern for perishable goods," *2007 INFORMS Marketing Science Conference*, Singapore, July 2007.
21. Ransbotham S., Murthy I., Mitra S., Narasimhan S., "Models for Sequential Grid Computing," *Proceedings of the First China Summer Workshop on Information Management*, Shanghai, China, July 22-23rd, 2007

### **Submitted Papers Under Review**

- S. Soni, I. Murthy, and S. Narasimhan, "A dual Ascent Procedure for the Design of Virtual Private Networks," submitted to *Operations Research*, Initial Submission November 2003. Revised and resubmitted February 2005, May 2006.
- S. Ransbotham, I. Murthy, S. Mitra, and S. Narasimhan, "Sequential Grid Computing: Models and Computational Experiments," submitted to *WITS* 2007.
- Zhe Qu, Sam Ransbotham, and Sridhar Narasimhan, "Procurement Contracting Strategy in a Hierarchical Supply Distribution Network," submitted to *Production and Operations Management*, May 2007

### **Work in Progress**

- I. Murthy, S. Mitra, and S. Narasimhan, “Multiperiod, Static and Dynamic Models for scheduling Jobs on a Grid with Stochastic Resources”
- S. Mitra, I. Murthy, and S. Narasimhan, “Optimal Resource Allocation over multiple Jobs in a Grid Computing Environment”
- Z. Qu, S. Narasimhan, and S. Ransbotham, "Procurement strategy in hierarchical supply chains"
- Z. Qu, S. Narasimhan, and D. J. Wu, "Online advance selling, supply contracting and Internet intermediaries - optimal distribution strategies in the hotel industry"
- K. Dutta, S. Narasimhan, and I. Murthy, “A Model for Assigning HR (Human Resources) Personnel to IT Projects”
- Doe-Hyun (Tiger) Song, N. Lurie, S. Narasimhan, “Decision Making in Small Screen Environments”

### **Conference Presentations**

1. “Route Selection in Backbone Data Communication Networks,” (with H. Pirkul and P. De), *ORSA/TIMS Joint National Meeting*, Miami, October 1986.
2. “A New Algorithm for the Design of Backbone Networks,” (with H. Pirkul), *TIMS/ORSA Joint National Meeting*, New Orleans, May 1987.
3. “Selecting Primary and Secondary Routes in Computer Networks,” (with H. Pirkul), *TIMS/ORSA Joint National Meeting*, New Orleans, May 1987.
4. “Concentrator Location with Primary and Secondary Coverage,” (with H. Pirkul and P. De), *ORSA/TIMS Joint National Meeting*, St. Louis, October 1987.
5. “An Assignment Problem with Queueing Costs,” (with S. Agnihotri and H. Pirkul), *ORSA/TIMS Joint National Meeting*, St. Louis, October 1987.
6. “Routing in Computer Networks with Reliability Considerations,” (with H. Pirkul), *TIMS/ORSA Joint National Meeting*, Washington, D.C., April 1988.
7. “An Optimal Solution Procedure for a Nonlinear Knapsack Problem,” *TIMS/ORSA Joint National Meeting*, Washington, D.C., April 1988.
8. “Capacity Assignment and Route Selection in Backbone Networks,” *TIMS/ORSA Joint National Meeting*, Washington, D.C., April 1988.

9. "Hierarchical Concentrator Location," *ORSA/TIMS Joint National Meeting*, Denver, October 1988.
10. "Concentrator Location with Multiple Coverage," *ORSA/TIMS Joint National Meeting*, Denver, October 1988.
11. "Designing Communication Networks with Reliability Considerations," *TIMS/ORSA Joint National Meeting*, Vancouver, May 1989.
12. "Concentrator Location with Variable Coverage," *ORSA/TIMS Joint National Meeting*, Philadelphia, October 1990.
13. "Metropolitan Area Network Design," (with L.J. LeBlanc), *ORSA/TIMS Joint National Meeting*, Anaheim, October 1991.
14. "Allocating Databases to Improve Availability," (with H. Pirkul), *ORSA/TIMS Joint National Meeting*, San Francisco, November 1992.
15. "Optimal Allocation of Files and File Servers on an Extended LAN," (with J. S. Park), *TIMS/ORSA Joint National Meeting*, Chicago, May 1993.
16. "Optimal Configuration of Client/Server Database Systems on Extended LANs," (with J. S. Park), *ORSA/TIMS Joint National Meeting*, Phoenix, November 1993.
17. "Model Management for Logistics Management," (with S. Mitra), *ORSA/TIMS Joint National Meeting*, Detroit, November 1994.
18. "Designing Private Packet Switched Networks with Time Varying Traffic," (with S. Mitra), *ORSA/TIMS Joint National Meeting*, Detroit, November 1994.
19. "Routing in Backbone Networks with Response-Time-Dependent Offered Traffic," (with L. J. LeBlanc and B. Ran), *INFORMS Joint National Meeting*, Los Angeles, April 1995.
20. "Routing in Wide Area Networks with Response-Time-Dependent Offered Traffic," (with updated model) (with L. J. LeBlanc and B. Ran), *INFORMS Joint National Meeting*, San Diego, May 1997.
21. "Routing in Backbone Networks with Response Time Dependent Offered Traffic," (with new computational results) (with L.J. LeBlanc and B. Ran), *INFORMS Joint National Meeting*, Salt Lake City, May 2000.
22. S. Narasimhan, S. Soni, S. Song, "ATM Network Design for Client Server Architectures," presented at International Telecommunications Conference, March

2001, Dallas, TX.

22. S. Soni, S. Narasimhan, L. LeBlanc, "Telecommunication Access Networks Design," *INFORMS Joint National Meeting*, Miami, FL, November 2001.
23. K. Dutta, S. Soni, S. Narasimhan, H. Thomas, and Anindya Datta, "Optimization approaches for accelerating dynamic content in E-Business," *International Federation of Operations Research Societies (IFORS) 2002*, Edinburgh, July 2002.
24. R. C. Basole, S. Soni, S. Narasimhan, "Optimal Capacity Expansion of Next-Generation Wireless Base Station Subsystems," Eighth Annual INFORMS Conference on Information Systems and Technology, October 2003, Atlanta, Georgia.
25. "Two-Layered Location Registration and Paging Areas Partitioning Problem in Mobile Communication Networks," (with C. H. Paik and S.Soni), 7th INFORMS Telecommunications Conference, Boca Raton, March 2004.
26. "Internet Auction Equilibrium Selection: Theory, Evidence, and Impact of Strategic Bidding Behavior," (with F. Zhong, D.J. Wu, and H. Zhang), Workshop on Information Systems & Economics (WISE) 2004, Washington, DC, December 2004.
27. "E-Sourcing: Buyer's Efficient Structure for Purchasing Preparation Process", (with R. Dai and D.J. Wu), Hawaii International Conference on System Sciences, HICSS-38, January 2005.
28. S. Soni, I. Murthy, and S. Narasimhan, "A dual Ascent Procedure for the Design of Virtual Private Networks," Operations Research Society of India Annual Meeting, Bangalore, India, December 2005.
29. S. Narasimhan, I. Murthy, S. Ransbotham, S. Mitra, "Sequential Grid Computing," *INFORMS Annual Meeting 2007*, Seattle, Washington, November 2007.

### **Courses Developed at Georgia Tech (New or Revised)**

#### **i) Graduate**

MGT 6050     *Management Information Systems* (Revised). Core required course in Information Technology Management for the Master of Science in Management (M.S.M.) Program in the DuPree College of Management.

Focuses on computer-based information systems and their applications to support management decisions. The emphasis is on the critical role

Information Systems play in all areas of organizations. Strategic uses of Information Technology are discussed.

MGT 6051 *Introduction to Database Management Systems* (New). An elective course for students majoring in ITM.

This course is an introduction to data base management systems with emphasis on design principles, implementation issues, data base administration, and organizational implications.

MGT 6053 *Data Communications for Management*. (New). An elective course for students majoring in ITM.

An introduction to data communications for management students. Concepts of network design, management, and security are introduced.

MGT 6054 *International Issues in Information Technology Management* (New). An elective course for students majoring in ITM.

An introduction to International Information Technology Issues. We focus on issues in Developed, Developing and Under-developed countries. Topics include Technology Transfer, Adoption and Diffusion, Overseas Software Development, Multinational Challenges for CIOs, and Issues for the Multinational Organization.

MGT 6055 *Decision Support and Expert Systems* (previously *Management Applications of Artificial Intelligence*) (New). An elective course for students majoring in ITM.

A study of artificial intelligence methods and systems in management, with emphasis on the use of knowledge-based methods. Topics include knowledge acquisition, knowledge structuring, knowledge representation, maintenance, and business applications.

MOT 6107 *Technology Strategies in Information Management* (New) (with S. Mitra). An elective course for students in the Executive Masters in Management of Technology program.

An introduction to Information Technologies.

IMBA 6060 *Information Systems for Management* (New) (with S. Mitra). An elective course for students in the GEMBA program.

An introduction to Information Systems.

MGT 6057 *Business Process Analysis and Design*. (New) (with S.Mitra) A new elective course for students majoring in ITM.

An introduction to the area of Business Process Engineering. Topics covered include the motivation for designing or reengineering business processes, analyzing and diagnosing problems with existing business procedures, planning, organizing and controlling the implementation of reengineered processes, the role of Information Technology in business process redesign, and IT based tools for analysis and design of Business Processes.

MGT 8803A IT Practicum (New) A new elective course for MBA students majoring in ITM.

This course is being offered at Georgia Tech for our MBA students who are interested in IT Management. The students will be working in groups of three individuals. The sponsoring organizations will describe their projects in the 1<sup>st</sup> week of class. Some organizations will offer more than project. Each group will have to select one project to work on for the semester (Depending on the nature of the projects it is possible that some groups could work on two projects). Note that all projects involve general management issues with a focus on information technology

MGT 8803A Seminar on Emerging Technologies (New) A new elective course for MBA students majoring in ITM.

Emerging technologies have the potential to change business environments rapidly, with profound implications for industrial organization, economic equilibriums, financial markets, and the quality of everyday life. This course is designed to provide students an overview of how to evaluate emerging technologies and to manage in dynamic environments by examining strategies, models, competitive capabilities, and market forces. The topics are structured to present many complementary views for managerial consideration. Although our analyses are independent of specific technologies, we will rely heavily on exemplar emerging cases to illustrate key aspects of each topic.

## ii) Undergraduate

MGT 2200 *Computer-based Management Systems* (Revised).  
(Previously 3050)

This is the required ITM course for all undergraduate management students and introduces them to Management Information Systems, Strategic Uses of Information Systems, Decision Support Systems, Systems Life Cycle, Systems Administration, and Maintenance Issues.

MGT 4053 *Data Communications for Management* (New). Undergraduate ITM elective.

An introduction to data communications for management students. Concepts of network design, management, and security are introduced.

MGT 4056 *Electronic Commerce* (Revised) Undergraduate ITM elective.

This course is designed to provide students a fundamental understanding of the impact of Internet technology, the World Wide Web, and developing technologies (e.g. wireless, media convergence) on business strategies, business models, and business competitive capabilities. The course will generally take the perspective of applying Internet technologies to solving business problems typically within the context of commercial organizations; considering the business-to-business, business-to-consumer, and consumer-to-consumer market spaces.

MGT 4058 *Database and Information Systems Development* (New).

This is one of the electives in ITM for Management students.

This course is an introduction to information systems and data base management systems. The emphasis is on design principles, implementation issues, data base administration, and organizational implications. Students are taught various techniques to analyze information system requirements for business applications.

### **Professional Service**

#### **Editorial and Reviewer Work for Technical Journals**

Member of the Editorial Review Board of *IEEE Transactions on Engineering Management*, 2004 -.

Associate Editor, *Electronic Commerce Research* (2001 -)

Associate Editor, *Electronic Commerce Research and Applications* (2001 -)

Member of the Editorial Review Board of *Information Technology and Management*. (1997 -)

Guest Editor, *Journal of Organizational Computing and Electronic Commerce*, Special Issue on Telework, Vol. 6, No. 4, 1996.

Edited a Special Issue of *Information Technology & Management*, Selected papers from WITS'99, Vol. 3, No. 4, 2002.

Guest Editor, *Information Technology & Management*, 2006. Selected Papers from CIST'03.

Member of the Editorial Review Board of the *Journal of Microcomputer Systems Management*. (1988-91)

Reviewed papers for:

- *Academy of Management Executive*
- *Annals of Operations Research*
- *Computer Networks and ISDN Systems*
- *Electronic Commerce Research*
- *European Journal of Operational Research*
- *ICIS – International Conference on Information Systems*
- *IEEE Journal on Selected Areas in Communications*
- *IEEE Transactions on Communications*
- *IEEE Transactions on Engineering Management*
- *ACM/IEEE Transactions on Networking*
- *IEEE Transactions on Systems, Man, and Cybernetics*
- *IEEE Computer*
- *INFOR - The International Conference on Information Systems*
- *INFOCOM - International Conference on Distributed Systems*
- *Information Technology and Management*
- *INFORMS Journal on Computing*
- *Journal of Information Technology and Management*
- *Journal of Management Information Systems*
- *Journal of Organizational Computing and Electronic Commerce*
- *Management Science*
- *Naval Research Logistics*
- *Operations Research*
- *Telecommunications Systems*
- *WITS – Workshop on Information Technology and Systems*
- Reviewer for the second JFIG (Junior Faculty at INFORMS Forum) paper competition 2004
- Reviewer for the third JFIG (Junior Faculty at INFORMS Forum) paper competition 2005

Reviewed proposals for the National Science Foundation (NSF).

## **Program Chair**

- Program Co-Chair for the Workshop on Information Technology and Systems (WITS'99), Charlotte, NC, Dec. 1999.
- Program Co-Chair, INFORMS Conference on Information Systems & Technology, Atlanta (October 2003)

## **Invited Session Chairperson/Organizer, Program Committees**

1. “Telecommunication Networks Design Problems,” *ORSA/TIMS Joint National Meeting*, Denver, October 1988.
2. “Advances in Modeling Computer Network Design,” *TIMS/ORSA Joint National Meeting*, Vancouver, May 1989.
3. “Methods for Designing and Analysis of Computer Networks,” *ORSA/TIMS Joint National Meeting*, New York, October 1989.
4. “Design of Computer Networks,” *ORSA SIG in Telecommunications Conference*, Boca Raton, March 1990.
5. Cluster Chair of the ORSA Telecommunications Technical Section for the *ORSA/TIMS Joint National Meeting*, San Francisco, October 1992.
6. Cluster Chair of the ORSA Telecommunications Technical Section for the *ORSA/TIMS Joint National Meeting*, Phoenix, November 1993.
7. Minitrack Coordinator (with K. Higa), “Telework: The Borderless Organization,” Hawaii International Conference on System Sciences -28, (HICSS-28), Maui, Hawaii, January 3-6, 1995.
8. Member of the Program Committee for the Workshop on Information Technology and Systems (WITS), Amsterdam, Dec. 1995.
9. Member of the Program Committee for the Workshop on Information Technology and Systems (WITS), Cleveland, Dec. 1996.
10. Member of the Program Committee for the INFORMS Conference on Information Systems and Technology and Systems (ICIST), Washington D.C., May 1996.

11. Member of the Program Committee for the INFORMS Conference on Information Systems and Technology and Systems (ICIST), San Diego, CA, May 1997.
12. Industry Liaison and Member of the Program Committee for the Workshop on Information Technology and Systems (WITS), Atlanta, Dec. 1997.
13. Member of the Program Committee for the INFORMS Conference on Information Systems and Technology and Systems (ICIST), Montreal, Canada, April 1998.
14. Member of the Program Committee for the International Conference on Electronic Commerce (ICEC), Seoul, S. Korea, April 1998.
15. Member of the Program Committee for the Workshop on Information Technology and Systems (WITS), Helsinki, Dec. 1998
16. Member of Panel, Georgia Tech-Graham Windsor Group Seminar on “Knowledge Based Organizations,” May 1996.
17. Member of Panel, Georgia Tech-Graham Windsor Group Seminar on “How Knowledge Organizations Use Information Technology to Win Customers,” November 1996.
18. Member of Panel, Georgia Technology Month, November 1996.
19. Member of the Program Committee, International Conference on Information Systems, 1997 – 2001
20. Program Co-Chair for the Workshop on Information Technology and Systems (WITS’99), Charlotte, NC, Dec. 1999
21. Member of the Program Committee, Workshop on Information Technology and Systems, 1995 – 2003.
22. Member of the Program Committee, Workshop on Advanced Issues of E-Commerce and Web-based Information Systems, 2001 –
23. Founding Member of the International Conference on Electronic Commerce (ICEC), 1998 – present
24. Member of the Program committee - INFORMS Conference on Information Systems & Technology, San Jose (November, 2002)

25. Member of the Program Committee, 7<sup>th</sup> INFORMS Telecommunications Conference, Boca Raton, March 2004.
26. Member of the Program Committee, International Conference on Information Systems, 2004.
27. Member of the Program committee - INFORMS Conference on Information Systems & Technology, San Francisco (November, 2005)
28. Member of the Program Committee, Workshop on Information Technology and Systems, 2005.
29. Member of the Program Committee, Manufacturing & Service Operations Management (MSOM) Conference, July 2006
30. Member of the Program Committee, Third Workshop on E-Business (WEB), December 2004
30. Member of the Program Committee, Fourth Workshop on E-Business (WEB), December 2005
30. Member of the Program Committee, Fifth Workshop on E-Business (WEB), December 2006
31. Member of the Program Committee, Workshop on Information Technology and Systems, 2006.
32. Served on National Science Foundation Review Panel. 2007.

### **Continuing Education (Executive Education)**

- **ITMP Executive Education Program**

Program Director for the **Information Technology Management Partnership (ITP)** Executive Education Program. This 55 hour program was developed and launched Fall 1997 in partnership with several Atlanta Area Organizations. The program is offered every Fall and Spring in both an Atlanta (for Atlanta area Partners) and Residence format (for non-Atlanta partners), with an average of 35 participants in each session. The Fall 2006 version of ITMP had revenues of \$160,000.00.

The partners include:

- AFLAC
- InterContinental Hotels
- Bell South Information Systems

- Bell South Telecommunications
  - Cabletron
  - Centers for Disease Control
  - Chick-Fil-A
  - Coca Cola
  - Coca Cola Enterprises,
  - Equifax
  - Federal Reserve Bank of Atlanta
  - Forces Command/Fort McPherson
  - GSA
  - Gulfstream Aerospace
  - HBO & Company
  - John B. Harland & Co.
  - Milliken
  - National Data Corporation
  - Office of Information Technology (Georgia Tech)
  - Southern Company
  - SCANA Energy
  - SunTrust Bank
  - Turner Broadcasting
- Exec Ed Modules developed and taught
  - “Database Design and Development,” *Internal Revenue Service*, 1991 – 1992
  - “Expert Systems in Service Industries,” *Bell South Executive Development Program*, 1993 – 1995
  - “Strategic Uses of Information Technology,”
    - *Georgia Tech Management Institute, (GTMI)*, 1994 – 1995
    - *Georgia Tech Mid-Management Program, (GTMMMP)*, 1996 –
    - *Bell South Executive Development Program*, 1996
    - *NTU Program for High Performance Managers*, 1997
  - “Management Information Systems,” *Apple South Management Institute*, 1995
  - “Management Information Systems & China,” *Shanghai Municipal Leaders Program*, 1995 - 1997
  - “Managing Information Technology Outsourcing,” *Information Technology Management Partnership*, 1997 – 2006

### **School Service**

**Area Coordinator for Information Technology Management**, College of Management, Fall 1988 - 2001. In this role, the following has been accomplished:

- (i) Recruiting Faculty. Led efforts to identify and recruit new faculty in the ITM area.
- (ii) Masters Program Level. Developed the Information Technology Management Curriculum for the M.S.M. Program. Before this there were no ITM courses required in the M.S.M. Core program and only one elective was offered occasionally. Currently there is one required core course in ITM and five elective courses. I advise M.S.M. students about the ITM area and inform them about employment opportunities.
- (iii) Undergraduate Courses and Certificate in “Information Systems”. Developed the Information Technology Management Curriculum for the undergraduate program including required and elective courses. There was no ITM area focus before this. Currently there are two required courses and five electives in the ITM area. I have also developed a new *Certificate in Information Systems* offered jointly by the DuPree College of Management and College of Computing. This is intended to give undergraduate students a serious treatment of both technical and managerial issues about developing and managing information systems. This certificate has received strong support from EDS in the form of an annual scholarship. After the move to the Semester System in Fall 1999, this certificate is called the *Certificate in “Information Technology Management.”*
- (iv) Ph.D. Curriculum. I have started the Ph.D. Program in Information Technology Management. Program development efforts addressed (a) course and curriculum design of ITM area content, (b) identification of research tools from other campus units, (c) design of program of study. The Ph.D. Program has graduated several students.
- (v) Student Advising. I meet with graduate and undergraduate students to counsel them on program requirements, courses, and career opportunities. I am also responsible for course waivers for ITM.

### **School/College/Institute Committees**

1. Member, DuPree College of Management Masters Committee, 1993 - 1998 .
2. Member, MSM Restructuring Committee, 1993-1994. This committee was responsible for the complete revision of the MSM Curriculum. The new curriculum is being implemented from Fall 1995.
3. Member, Center for Enterprise Systems, 1994 -. This Center focuses on Business Process Engineering. Faculty members from GTRI, the College of Computing, and DuPree College of Management are involved in its activities.

4. Member of SERBIS (Senior Executives Roundtable on Information Systems), 1994 -. This roundtable is a forum for senior executives facing IT related issues. The companies pay an annual membership to SERBIS which holds two meeting every year.
5. Member, Management of Technology Task Force, 1989 - 1991.
6. Member, Ad-Hoc Committee on Information Technology Management, College of Management. Fall 1987.
7. Member, Decision Sciences Reorganization Committee, 1988-89.
8. Member, Computer Use Committee of the College of Management, 1988-89.
9. Member, Technical Review Committee, AIMS Project, OIT, 1993.
10. Member, Manufacturing Research Council, September 1994 - 1996 .
11. Member, Personnel Committee, School of Management, 1995 - 1997.
12. Member, DuPree Center Faculty Governance Committee, Georgia Tech, 1996 - .
13. Member, Center for International Business Education and Research (CIBER) Core Faculty, 1993 - .
14. Member, Ad-Hoc Committee of the DuPree School of Management Restructuring Committee, Fall 1996.
15. Member, Information Systems Applications Committee (ISAC), December 1996 – Spring 97.
16. Co-Chair (with J. Covin) of the MOT Certificate Revision Committee, 1997-1998.
17. Co-Chair (with S. Navathe) of the Information Technology Program Area at Georgia Tech, Summer 1997 – Fall 1997.
18. Co-Chair (with S. Ghosh) of the Information Technology Task Force for the DuPree College of Management at Georgia Tech, Fall 1997 – Spring 98.
19. Chair, of the Computer Committee for the DuPree College of Management at Georgia Tech, Spring 1998 –

20. Co-Chair (with F. Riggins) of the Electronic Commerce Task Force for the DuPree College of Management, Summer 1998 – Spring 1999. This resulted in the approval of the E-Commerce Center which is now funded at \$1,000,000.00.
21. Faculty Director of the Information Technology Management Partnership, Fall 1997 –
22. Led Faculty Recruiting Efforts for the ITM area, Fall 2001 – Spring 2002. Successful hire of Dr. Rui Dai, Assistant Professor from University of Texas at Austin.
23. Led Faculty Recruiting Efforts for the ITM area, Fall 2002 – Spring 2003. Successful hire of Dr. D. J. Wu, Associate Professor from Drexel University.
24. Appointed Chair of Costley Chair Search Committee, December 2002 – December 2003
25. Member of the Promotion and Tenure Committee, College of Management at Georgia Tech, Fall 2001 –
26. Chair of the Promotion and Tenure Committee, DuPree College of Management at Georgia Tech, Fall 2003 – Spring 2004
27. Chair of the Promotion and Tenure Committee, College of Management at Georgia Tech, Fall 2004 – Spring 2005
28. Chair of the Promotion and Tenure Committee, College of Management at Georgia Tech, Fall 2005 – Spring 2006
29. Chair of the Promotion and Tenure Committee, College of Management at Georgia Tech, Fall 2005 – Spring 2006
30. Chair of the EMSMOT Committee, Fall 2002
31. Member of the Faculty Advisory Board, GT Information Security Center.
32. Member of the Executive Programs Degree Committee, 2003-2004.
33. Member of Costley Chair Search Committee, January 2004 – January 2005.
34. Member of the COM Faculty Advisory Board, 2002-03, 2003-04, 2004-05
35. Member of the Institute Study Abroad Committee, 2003-04, 2004-05
36. Member of the Institute MS-SSE Sub-Committee on Information and Enterprise Systems, Fall 2005 – Spring 2006

37. Member of the Institute RP&T Committee, 2003-04, 2004-05, 2005-06, 2006-07
38. Member of the College of Management Dean Search Committee, 2005-06
39. Chair of Costley Chair Search Committee, 2006-07
40. Member of the COM Faculty Advisory Board, 2006-07
41. Chair of the Promotion and Tenure Committee, College of Management at Georgia Tech, Fall 2005 – Spring 2006

### **Doctoral Committees**

1. Chairman of Dissertation Committee of Ph.D. student, Jinchang Wang, defended July 1990.
2. Member of Dissertation Committee of Ph.D. student, Nasr Eddine Belkeir, College of Computing, defended February 1992.
3. Member of Dissertation Committee of Ph.D. student, Kamal Karlapalem, College of Computing, defended December 1992.
4. Member of Dissertation Committee of Ph.D. student, Chungki Lee, College of Computing, defended Nov. 1993.
5. Member of Dissertation Committee of Ph.D. student, Vesper Owei, defended November 1994.
6. Member of Dissertation Committee of Ph.D. student, Russell J. Clark, College of Computing, defended May 1995.
7. Member of Dissertation Committee of Ph.D. student, Kiran J. Achyutuni, College of Computing, defended June 1995.
8. Chairman of Dissertation Committee of Ph.D. student, MaryBeth Fritz, defended November 1995.
9. Member of Dissertation Committee of Ph.D. student, Tony Chaya, defended May 1997.

10. Member of Dissertation Committee of Ph.D. student, Mei Zhang, School of Industrial and Systems Engineering, defended September 1997.
11. Co-Chairman of Dissertation Committee of Ph.D. student, Michael Alan Smith, defended June 1998.
12. Member of Dissertation Committee of Ph.D. student, Ashok Savasere, College of Computing, defended August 1998.
13. Co-Chairman of Advisory Committee of Ph.D. student, Jai-Yeol Son, defended June 2001.
14. Co-Chairman of Advisory Committee of Ph.D. student, Sung Kim, defended May 2001.
15. Member of Dissertation Committee of Ph.D. student, Kyoo-Chul (KC) Shin, School of Civil Engineering, defended November 2000.
16. Member of Dissertation Committee of Ph.D. student, Helen Thomas, defended September 2001.
17. Member of Dissertation Committee of Ph.D. student, Wei Hua, School of Industrial and Systems Engineering, defended July 2001.
18. Member of Dissertation Committee of Ph.D. student, Kaushik Dutta, defended May 2003.
19. Member of Dissertation Committee of Ph.D. student, Hansoo Kim, School of Industrial and Systems Engineering, defended April 2004.
22. Advisor, 1<sup>st</sup> paper, Zhe Qu, Fall 2004.
23. Co-Advisor, 2<sup>nd</sup> paper, Zhe Qu, Fall 2004.
24. Member of Dissertation Committee of Ph.D. student, Fang Zhong, since Fall 2003, in progress.
25. Advisor, 2<sup>nd</sup> paper, Tiger Song, Fall 2006.
26. Chair of Dissertation Committee of Ph.D. student, Zhe Qu, since Fall 2004, in progress.
27. Member of Dissertation Committee of Ph.D. student, Sam Ransbotham, since Fall 2004, in progress.

## **Masters Committees**

1. Member of Masters Committee of M.S. Student, Arati Srinivasan, School of Textile and Fiber Engineering, defended, June 2001.

## **Academic Awards**

Was selected to participate in the 1986 Doctoral Consortium of the Seventh International Conference on Information Systems held in San Diego, December 12 - 14, 1986.

Was awarded a Presidential Fellowship by the Graduate School, The Ohio State University for outstanding research ability and promise (Fall 1986 – Summer 1987).

Received a fellowship at the University of Rochester from July 1981 to March 1984.

Winner of a Gold Medal for being judged the best Quantitative Methods student at the Indian Institute of Management, Bangalore, India.

Received a scholarship at the Indian Institute of Management, Bangalore, India, from July 1979 to April 1981.

Founding Member of the International Conference on Electronic Commerce (ICEC), Seoul, S. Korea, April 1998

Recognized by Georgia Tech (April 1998) as one of its exemplary senior faculty during the post-tenure review.

Nominated by the DuPree College of Management for Georgia Tech's Outstanding Continuing Education Award, February 2001 & December 2001.

Nominated and selected for Senior Teaching Fellow (Hesburgh Fellow) Program at CETL, Georgia Tech – 2002

## **Professional Membership**

The Institutes for Operations Research and Management Sciences (INFORMS),  
Institute of Electrical and Electronics Engineers (IEEE),

Association for Computer Machinery (ACM)