

## SIDDHARTHA BHATTACHARYYA

Information and Decision Sciences Department,  
College of Business and Administration,  
University of Illinois at Chicago,  
601 S. Morgan Street (MC 294) , Chicago, IL 60607

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[sidb@uic.edu](mailto:sidb@uic.edu)

### EDUCATION

- Doctor of Philosophy, University of Florida, Gainesville, August 1993.  
Decision and Information Sciences, College of Business Administration.
- Bachelor of Engineering, Birla Institute of Technology, Ranchi, India, 1986.  
Electronics and Communications Engineering.

### EMPLOYMENT

- Interim Department Head, Decision and Information Sciences, College of Business Administration, University of Illinois at Chicago, 2012-.
- Director of Undergraduate Programs, College of Business Administration, University of Illinois at Chicago, 2009-2011.
- Associate Professor, Information and Decision Sciences, College of Business and Administration, University of Illinois at Chicago, 2003-.
- Assistant Professor, Information and Decision Sciences, College of Business and Administration, University of Illinois at Chicago, 1997-2003.
- Visiting Researcher, Olsen and Associates, Research Institute for Applied Economics, Zurich, Switzerland, Summer 1996, 1997
- Assistant Professor of Management Information Systems, Department of Management, College of Business and Administration, Southern Illinois University at Carbondale, 1993 to 1997.
- Graduate Assistant in the Decision and Information Sciences Department, University of Florida, Gainesville, August 1989 to August 1993.
- Customer Engineer (computer systems customer support) with ORG Systems, Baroda, India, August 1986 to July 1989.

### RESEARCH INTERESTS

- Agent-based models, Complexity, Computational modeling
- Business intelligence, Business analytics, Data mining,
- Social computing, E-business, Information Management
- Evolutionary computation, Machine learning, Intelligent decision support

### RESEARCH

#### Publications

- Bhattacharyya, S., S. Jha, K. Tharakunnel, C. Westland, "Data Mining for Credit Card Fraud - A Comparative Study", *Decision Support Systems*, 50(3), 2011.
- Bhattacharyya, S. and S. Ohlsson, "Social Creativity as a Function of Agent Cognition and Network Properties: A Computer Model", *Social Networks*, 32(4), 2010.
- Bhattacharyya, S., "Predictive Modeling on Multiple Marketing Objectives using Evolutionary Computation" in J. Casillas and F.J. Martínez-López (eds.), *Marketing Intelligent Systems using Soft Computing*, Springer, Studies in Fuzziness and Soft Computing, vol. 258, 2010.
- Zhang, Y. and S. Bhattacharyya, "Information Sharing Strategies in Business-to-Business E-Hubs: An Agent-Based Study ", *Journal of Intelligent Information Technologies*, vol. 6, no. 2, 2010.
- Zhang, Y., S. Bhattacharyya, and X. Li, "From Choice of Procurement Strategy to Supply Network Configuration: An Evolutionary Approach", *International Journal of Information Technology & Decision Making*, vol.9, no.1, 2010, 145–173.

- Tharakunnel, K. and S. Bhattacharyya, "Single-Leader-Multiple-Follower Games with Boundedly Rational Agents", *Journal of Economic Dynamics and Control*, vol. 33, no. 8, 2009, 1593-1603.
- Zhang, Y. and S. Bhattacharyya, "Analysis of B2B E-Marketplaces: An Operations Perspective", *Information Systems and E-Business Management*, vol. 8, no. 3, Springer-Verlag, 2008.
- Lundquist, D. and S. Bhattacharyya, "Finding Seller Quality and Quality Sellers in Online Markets: An Agent-Based Approach", *International Journal of Electronic Business*, vol. 6, no. 1, 2008.
- Zhang, Y. and S. Bhattacharyya, "Effectiveness of Q-Learning as a Tool for Calibrating Agent-Based Supply Network Models", *Enterprise Information Systems*, 1(2), 217-233, 2007.
- Mehta, K. and S. Bhattacharyya "Design, Development and Validation of an Agent-Based Model of Electronic Auctions", *Information Technology and Management*, vol 7, no. 3, 2006.  
[Review of this paper in *ACM Computing Reviews*, Nov 29<sup>th</sup>, 2006.]
- Mehta, K. and S. Bhattacharyya "Adequacy of Training Data for Evolutionary Mining of Trading Rules," *Decision Support Systems*, v.37 n.4, p. 461-474, 2004. Issue on Data Mining for Financial Decision Making, Wang, H., and A. S. Weigend (Eds.).
- Zhang, Y. and S. Bhattacharyya "Genetic Programming for Large-Scale Classification: An Ensemble Approach", *Information Sciences*. v. 163 , n. 1-3, 2004. Issue on Soft Computing Data Mining, A. Ghosh and S.K. Pal (Eds.).
- Wu, S. and S. Bhattacharyya. "Minimal Intelligence Agents in Double Auction Markets with Speculators". Computational Economics: A Perspective from Computational Intelligence. S-H. Chen (Ed.), 2005.
- Bhattacharyya, S. "Evolutionary Computation for Data Mining", *Journal of Database Marketing*, v. 10, n. 4, p. 343-352, 2003.
- Bhattacharyya, S. and M.D. Troutt, "Genetic Search over Probability Spaces", *European Journal of Operational Research*, 144, 333-347, 2003.
- Bhattacharyya, S., O.V. Pictet and G. Zumbach, "Knowledge-Intensive Genetic Discovery of Foreign Exchange Trading Models", *IEEE Transactions on Evolutionary Computation*, 6(2),169-181, April, 2002.
- Bhattacharyya, S. and K. Mehta, "Evolutionary Induction of Trading Models", in S-H. Chen (Ed.), Evolutionary Computation in Economics and Finance, Studies in Fuzziness and Soft Computing, 100, Physica-Verlag, 2002.
- Liu, L., S. Bhattacharyya, S. Sclove, R. Chen and W.J. Lattiyak, "Data Mining on Time Series: An Illustration Using Fast-Food Restaurant Franchise Data", *Computational Statistics and Data Analysis*, **37**(2001), 455-476.
- Bhattacharyya, S., "Direct Marketing Performance Modeling using Genetic Algorithms", *INFORMS Journal of Computing*, vol. 11, no.3, Summer 1999.
- Bhattacharyya, S. and P. Pendharkar, "Inductive, Evolutionary, and Neural Techniques for Discrimination: A Comparative Study", *Decision Sciences*, vol. 29, no. 4, 871-900, Fall, 1998.
- Aytug H., Bhattacharyya, S. and G.J. Koehler\*, "Genetic Learning through Simulation: An Investigation in Shop-Floor Scheduling", *Annals of Operations Research*, Issue on Business Applications of Artificial Intelligence, vol. 78, p. 1-29, 1998.
- Bhattacharyya, S. and G.J. Koehler, "Learning by Objectives for Adaptive Shop-Floor Scheduling", with *Decision Sciences*, vol. 29, no. 2, 347-376, 1998.
- Aytug H., Bhattacharyya, S. and G.J. Koehler, "A Markov Chain Analysis of Genetic Algorithms with  $2^x$  Cardinality", *European Journal of Operational Research*, vol. 96, no. 1, p. 195-201, 1997.
- Koehler, G.J., S. Bhattacharyya and M.D. Vose "General Cardinality Genetic Algorithms", *Evolutionary Computation*, vol. 5, no. 4, 439-459, 1997.
- Bhattacharyya, S. and G.J. Koehler, "An Analysis of Non-Binary Genetic Algorithms with Cardinality  $2^v$ ", *Complex Systems*, 8, 1994, pp. 227-256.
- Aytug H., Bhattacharyya, S., G.J. Koehler and J.L. Snowdon "A Review of Machine Learning in Scheduling", *IEEE Transaction in Engineering Management*, 41, No. 2, May, 1994, pp. 165-171.

## Refereed Conference Papers

- A. Ramaprasad, A. Vij, S. Bhattacharyya. Collaboration Conceptual Modeling for Web Portal Design Using an Ontology, *Proc. Hawaii Intl Conference on System Sciences (HICSS-45)*, Jan, 2012.
- S. Bhattacharyya, "Confidence in Predictions from Random Tree Ensembles", *Proc. IEEE International Conference on Data Mining (ICDM 2011)*, December, 2011.

- S. Bhattacharyya and S. Ohlsson, "How Network Structure Affects Social Creativity", *Proc. Third IEEE International Conference on Social Computing*, October, 2011, MIT, Boston.
- K. Tharakunnel and S. Bhattacharyya, "A Leader-Follower Computational Learning Approach to the Study of Restructured Electricity Markets: Investigating Price Caps", *Proc. Hawaii International Conference on System Sciences (HICSS-41)*, 2008.
- K. Tharakunnel and S. Bhattacharyya, "Leader-Follower Semi-Markov Decision Problems: Theoretical Framework and Approximate Solution". In *Symposium on Approximate Dynamic Programming and Reinforcement Learning, IEEE Symposium Series on Computational Intelligence*, 2007.
- S. Bhattacharyya and K. Tharakunnel, "Incentive Alignment with Limited Information in Decentralized Information Systems", *International Symposium of Information Systems*, Indian School of Business, Hyderabad, India, 2006.
- D. Lundquist and S. Bhattacharyya, "Price Dispersion in Online Markets: An Agent-Based Approach", in *Proceedings of the Fifth Workshop on e-Business (WeB 2006)*.
- Tharakunnel, K. and S. Bhattacharyya, "Supply Chain Coordination Under Vendor Managed Inventory (VMI) Arrangement: A Decentralized Learning Approach", *Proceedings of the Fourth Workshop on e-Business (WeB 2005)*, Dec. 2005.
- Tharakunnel, K. and S. Bhattacharyya, "Reinforcement Learning in Leader-Follower Multiagent Systems", *Proceedings of the 14<sup>th</sup> Annual Workshop on Information Technologies and Systems (WITS 2004)*, 2004.
- Zhang, Y. and S. Bhattacharyya, "Learning to Order in Supply Networks: An Agent Modeling Study," *Proceedings of the Agent 2004 Conference*, 2004.
- Samant, K. and S. Bhattacharyya, "Topology, Search, and Fault Tolerance in Unstructured P2P Networks", in *Proceedings of the 37th Annual Hawaii International Conference on System Science, 2004 (HICSS'04)*.
- Mehta, K. and S. Bhattacharyya, "Alignment and Validation in an Agent-based Model of Online B2C Auctions", *Proceedings Agent 2003 Conference on Challenges in Social Simulation*, 2003.
- D'Souza, K. and S. Bhattacharyya, "Dynamics of Expertise in Organizations: An Agent-based Modeling Exercise", *Proceedings Agent 2003 Conference on Challenges in Social Simulation*, 2003.
- Wu, S. and S. Bhattacharyya, "Minimal Intelligence Agents in Double Auction Markets with Speculators", *Proceeding of the 7<sup>th</sup> Joint Conference on Information Sciences, JCIS 2003*, September, 2003.
- Bhattacharyya, S., "Aggregation in an Object Algebra and Application to Multi-Dimensional Analysis and OLAP", *Proceedings of the Workshop on Information Technology and Systems (WITS-02)*, December, 2002.
- Wong, R. and S. Bhattacharyya, "Task-Structure Analysis: A Modularized Approach for Modeling Knowledge Intensive Processes", in *Proceedings of the Hawaii International Conference on System Sciences (HICSS-35)*, January 2002.
- S. Bhattacharyya, "Evolutionary Algorithms in Data Mining: Multi-Objective Performance Modeling for Direct Marketing", in *Proceedings of the Sixth International Conference on Knowledge Discovery and Data Mining (KDD-2000)*, Boston, August 2000, AAAI Press.
- S. Bhattacharyya and M.D. Troutt, "Crossover in Probability Spaces", in *Proceedings of the International Genetic and Evolutionary Computation Conference (GECCO-2000)*, July 2000, AAAI Press.
- S. Bhattacharyya, "Multi-Objective Data-Mining using Genetic Search", *Proceedings of the GECCO-2000 Workshop on Data Mining with Evolutionary Algorithms*, July 2000, AAAI Press.
- Pendharkar, P. and S. Bhattacharyya, "An Evolutionary Computation Framework for Learning Multi-Agent Coordination for Dynamic Production Scheduling", *Proceedings of the 2001 Information Resources Management Association (IRMA) International Conference*, May, 2001.
- K. Mehta and S. Bhattacharyya, "Combining Genetic Algorithm Based Models for Financial Forecasting", in *Proceedings of the 1999 Congress on Evolutionary Computation (CEC-99)*, vol. 2, 1245-1252, Washington D.C., July, 1999, IEEE Press.
- S. Bhattacharyya, "Direct Marketing Response Models using Genetic Algorithms", in *Proceedings of the Fourth International Conference on Knowledge Discovery and Data Mining (KDD-98)*, New York, August, 1998, AAAI Press.
- S. Bhattacharyya, O.V. Pictet and G. Zumbach, "Representational Semantics for Genetic Programming Based Learning in High-Frequency Financial Data", in *Proceedings of the Third Annual Genetic Programming Conference (GP-98)*, 11-16, Madison, Wisconsin, July, 1998, Morgan Kaufmann Pub.

- K. Mehta and S. Bhattacharyya, "Staged Learning of Trading Rules Using Genetic Algorithms", with K. Mehta, in *Proceedings of the Third INFORMS Information Systems and Technology Conference*, Montreol, April, 1998.
- Sengupta, R. and S. Bhattacharyya, "Zip-Codes for Direct Marketing Models using Geographic Information Systems", in *Proceedings of the Association of Information Systems Conference*, 1997.
- Dejnarak, A. and S. Bhattacharyya, "Data Mining with Genetic Algorithms Under Cost Uncertainty", in *Proceedings of the Decision Sciences Institute National Conference*, 1997.
- Pendharkar, P. and S. Bhattacharyya, "Multi-Agent Learning in Distributed Artificial Intelligence", in *Proceedings of 2nd INFORMS Conference on Information Systems and Technology*, San Diego, CA, May 1997.
- Pendharkar, P. and S. Bhattacharyya, "A Comparison of Statistical and Machine Learning Techniques for Discriminant Analysis", in *Proceedings of the First Americas Conference on Information Systems*, Pittsburgh, August, 1995.
- S. Bhattacharyya and G.J. Koehler, "Object-Case Retrieval for Intelligent Decision Support", in *Proceedings of the Workshop on Information Technology and Systems (WITS-95)*, Amsterdam, December, 1995.

### Technical Reports

- "Price-cap Regulation in Energy Markets – a Leader-Follower Computation Approach", with K. Tharakunnel, 2009.
- "Aggregation and OLAP in Object Databases", 2003.
- "Modeling Audit Risk: Towards Robust Knowledge-based Support in Auditing", with R. Wong. 2003.
- "Genetic Learning for Multi-Objective Data-Mining Problems", 2002.
- "Genetic Learning in Financial Time-Series Data: Focus on Fitness Measures", with K. Mehta, Information and Decision Sciences, University of Illinois at Chicago, 2002.
- S. Bhattacharyya and O.V. Pictet, "Genetic Learning of Trading Models", Technical Document SIB.1996-07-08, Olsen and Associates, Research Institute for Applied Economics, Zurich, Switzerland, 1996.
- H. Aytug, S. Bhattacharyya, G.J. Koehler and J.L. Snowdon, "A Decision Support System Framework for Dynamic Scheduling", Decision and Information Sciences, University of Florida, 1993.

### Miscellaneous Presentations

- "Learning under Hierarchy and Competition", with K. Tharakunnel, *INFORMS Annual Meeting*, San Francisco, CA, November, 2005.
- "Capturing Greater Realism with Agent-Based Supply Network Models", with Y. Zhang, *INFORMS Annual Meeting*, San Francisco, CA, November, 2005.
- "Reinforcement Learning in Leader-Follower Multiagent Systems", with K. Tharakunnel, *INFORMS Annual Meeting*, Denver, September, 2004.
- "Supply Chain: from Hierarchies to Markets in an Era of Outsourcing", with Y. Zhang, *INFORMS/CORS Joint International Meeting*, Banff, Canada, May, 2004.
- Y. Zhang and S. Bhattacharyya, "Designing Agent based Models for Supply Networks" Workshop on Revolutionary Strategies And Tactics In Research Design And Data Collection For E-Business Management Research, *International Conference on Electronic Commerce*, 2003.
- "Information Sharing in Supply Networks," with Y. Zhang, *INFORMS Annual Meeting*, 2003.
- "Multi-Agent Approach for Modeling Electronic Auctions", with K. Mehta, *INFORMS National Meeting*, Miami, FL, November, 2001.
- "Evolutionary computation for multi-objective data mining". *INFORMS National Meeting*, Miami, FL, November 2001.
- "The Application of Genetic Algorithms to Market Modeling", in *Understanding the Mathematical and Statistical techniques used in Marketing*, Henry Stewart Conference Studies, Chicago, September 2000.
- "Genetic algorithms and application to direct marketing", Seminar for Bank of America, San Francisco, February, 1999.
- "Genetic Learning in Financial Time-Series Data", with K. Mehta, invited paper, *Workshop in Machine Learning and Econometrics in Finance, International Conference on Artificial Intelligence (ICAI '99)*, Las Vegas, June 1999.

- "Genetic-Programming Based Learning in High-Frequency Financial Data", *INFORMS Spring 1999 Meeting*, Cincinnati, May, 1999.
- "Techniques for Data Mining: Genetic Algorithms", *Successful Data Mining for Marketers*, Henry Stewart Conference Studies, San Francisco, April, 1998.
- "Database Analysis and Modeling", Seminar for Sears, Roebuck and Company, Hoffman Estates, IL, October, 1998.
- "Genetic Learning of Decision Rules in Financial Markets", with K. Mehta, *INFORMS National Meeting*, Montreal, 1998.
- "Forma Theoretic Genetic Search Over Probability Spaces", with M.D. Troutt, *INFORMS National Meeting*, Dallas, 1997.
- "Genetic Algorithms: Their Potential in Database Marketing", *National Council for Database Marketing*, Orlando, December 1996.
- Seminar in Genetic Algorithms for Direct Marketing, *Research Council of the Direct Marketing Association*, New York, 1995.
- "A Genetic Algorithm Model for the Two-Group Classification Problem with a Depth-of-File Constraint", with B. Ratner, *INFORMS National Meeting*, New Orleans, Oct., 1995.
- "Adaptive Scheduling using Genetic Algorithms", *INFORMS National Meeting*, New Orleans, Oct., 1995.
- "Analyzing General Cardinality Genetic Algorithms", with G.J. Koehler *INFORMS National Meeting*, New Orleans, Oct., 1995.
- "Multiple Evaluations in the Learning of Scheduling Strategies", *ORSA/TIMS Joint National Meeting*, Detroit, Oct., 1994.
- "Genetic Learning for Job Shop Scheduling", with G.J. Koehler *Symposium on Business Applications of AI*, University of Virginia, Nov., 1993
- "A Decision Support Framework for Dynamic Scheduling", with H. Aytug and G. J. Koehler *Symposium on Business Applications of AI*, University of Virginia, Nov., 1993.
- "Learning with Multiple Intelligent Objects in a Production Environment", with H. Aytug, G. J. Koehler and J.L. Snowdon, *ORSA/TIMS National Conference*, Chicago, May, 1993.
- "Higher Cardinality Genetic Algorithm Models", with G.J. Koehler, *ORSA/TIMS National Conference*, Phoenix, Oct-Nov., 1993.

## Software

- evolveDM (Evolutionary optimization for Direct Marketing), BSCumLifts (Bootstrap Cumulative Lifts), DMAX (Decile MAXimization).
- Financial trading models using genetic programming, high-frequency data.
- Various analytics tools - decision trees, neural networks, genetic algorithms, sparse distributed memory, etc.

## DOCTORAL DISSERTATIONS DIRECTED

- Kurian Tharakunnel, Leader-Follower Multi-agent Systems: Incentive Design with Limited Information, 2008.
- Yifeng Zhang, Information Sharing in Supply Networks and Business-to-Business Exchanges, 2006.
- Kumar Mehta: Understanding Revenue Drivers in Electronic Auctions, 2002.
- Roman Wong: The Task-Structure Approach to Knowledge Modeling: An Application to Audit Risk Assessment, 2000.
- Parag Pendharkar: Coordination in Multi-Agent Learning Systems, 1998.

## GRANTS/FUNDING

- Establishment of the CcIT Lab: Tracking Creative and Collaborative Information Technology, College of Business Administration, University of Illinois, Chicago, 2011. [\$497,000] (with Mary Beth Watson Manheim, Steve Jones, Eric Welch).

- Dynamic Leader-Follower Problems: A new Theoretical Framework and a Machine Learning based Computational Approach, National Science Foundation, 2006 [\$86,994].
- Networks for Technological Innovation. Campus Research Board, University of Illinois at Chicago, 1998, with Stellan Ohlsson, Dept of Psychology, UIC, 2000 [\$15,000].
- Agent Based Simulation of Electronic Auction Markets. Center for Research in Information Management, University of Illinois at Chicago, 1999-2000 [\$18,500].
- Genetic Learning of Trading Models in High-Frequency Financial Data, Olsen and Associates, Research Institute for Applied Economics, Zurich, Switzerland, 1998 [\$30,000+].
- Data Warehousing and OLAP in Object-Oriented Databases. Center for Research in Information Management, University of Illinois at Chicago, with V. Owei, 1998-99 [\$23,000].
- Research Equipment Grant, Campus Research Board, University of Illinois at Chicago, with A. Ouksef, 1998 [\$6,000].
- Genetic Learning for Direct Marketing Applications, Ratner & Associates, New York, 1994-95 [\$20,000].
- Design of a Semantic Interface for Data Mining, IBM Corp., 1995 [\$30,000]. Investigators: A. Ramaprasad, S. Bhattacharyya and A. Rai.
- Establishing a Point of Reference for Information Systems Disaster Recovery, Comdisco Inc., [\$50,000]. Investigators: A. Ramaprasad, A. Rai and S. Bhattacharyya.
- Summer research grant, Office of Research and Development, Southern Illinois University at Carbondale, Summer, 1995 [\$6,000].
- Client-Server Systems Simulation, Summer research grant, Pontikes Center for Management of Information, Southern Illinois University at Carbondale, Summer, 1994, [\$1,760].
- Hybrid Technologies for Pattern Induction in Data Mining (co-PI), University Priorities and Interdisciplinary Initiative program, Southern Illinois University at Carbondale, 1993 [\$6,000].

### Other funding

Industry-university collaboration under Center for Research in Information *Management*, UIC. \$40,000 (2007), \$12,000 (2008).

## TEACHING

### Courses

- Business Data Mining (Undergraduate, Graduate/Professional)
- Intelligent Decision Support, Data warehousing, Data Mining (PhD/MS/MBA/Undergraduate).
- Project Management – Projects (MS-MIS capstone project experience)
- Business Systems Analysis and Design (Senior/MBA)
- Computational Modeling in Business, Agent-based modeling (PhD)
- Management of Information Systems (Undergraduate, MBA)
- Business Computing (Programming) (Undergraduate)
- Decision Support and Expert Systems (Undergraduate/MBA)
- Object-Oriented Systems Development (MS)
- Information Engineering Seminar (Ph D./MBA)

### Awards

UIC Liautaud Graduate School of Business Favorite MIS Professor Award, April, 2010.  
 UIC Liautaud Graduate School of Business Favorite MIS Professor Award, December, 2007.  
 UIC Liautaud Graduate School of Business Favorite MBA Professor Award, December, 2004.  
 UIC College of Business Dean's Letter for Teaching Excellence, 1999, 2000, 2002-2008.

## INDUSTRY-UNIVERSITY PARTNERSHIP

Established relationships with various private and public sector organizations to provide experiential learning and project experience for capstone requirement of the MS-MIS program. Success is profiled in “**Students Excel in**

**MIS Capstone”, BIZ – Magazine for Alumni and Friends of the College of Business Administration, UIC: Spring 2010, volume 3-number 1.**

Leading graduate student teams for technology-business related projects with Chicago area companies, 2005-2011.

Sample of projects completed:

Business Analytics Governance Practices (Emdeon)  
Health Insurance Analytics (Healthcare Services Corp)  
Software Licensing and Pricing (Microsoft)  
KPI Scorecard Business Intelligence (Reyes Holdings, Martin-Brower),  
Workforce Planning - models, analysis (CNA Insurance).  
City of Chicago IT Strategic Plan 2011-2015 (City of Chicago)  
RFP Management (Disney /ESPN)  
Corporate Citizenship Portal (Accenture)  
IT Program Status Portal (Aon)  
Technical Infrastructure Analyses (United Way of Metropolitan Chicago)  
Collaborative work using SharePoint and MS Office for Horizontal Lines of Business (Microsoft)  
Toddler Town – Social Networking for Kids and Parents (Targeted Technology Solutions)  
Healthcare Meaningful Use Dashboard (Chicago Health IT Regional Extension Center)  
Helpdesk System for Global Operations (Littelfuse)  
Customer Segmentation and Market Basket Analysis (Sagence Group)  
Social Networking Platform using open source tools (Illinois Technology Association)  
Search Engine Optimization (Duraco)  
Scorecard Metrics for Sales Teams (Microsoft)  
Leveraging Online User Generated Content (Cognizant Technology Solutions),  
Enterprise systems analysis (City of Chicago)  
Application Monitoring Systems (CNA Insurance)  
Multi-tier online ordering system –Requirements and Prototype (Liners Direct)  
Business Continuity Plan/Disaster Recovery System (NewWorld Van Lines)  
Process analysis, system design, implementation to track underwriter change requests (CNA Insurance),  
Web2.0 and Knowledge Management (Blackwell Consulting Services),  
Technology services market analysis and growth strategy (fast food industry) (Tata Consultancy Services)  
Knowledge Management with MS SharePoint (Blackwell Consulting Services)  
Biometrics based time and attendance system (IntelliSys Technology)  
Outcome Measurement: process and data mapping, core outcome measures, implementation plan (Boys and Girls Clubs of Chicago)  
Global Response Survey – analysis and management (Microsoft)

## **PROFESSIONAL and ACADEMIC SERVICE**

### **University**

Information and Decision Sciences Department, UIC:

- Director of Undergraduate Studies, 2004-2008.
- Member of IDS Self Study and External Review Team, 2008.
- Chair, MIS Committee, 2002-2007.
- Chair, MS-MIS Program Revision Committee, 2003.
- Chair, PhD Program Revision Committee, 2003.
- Member of Department Head's Advisory Committee, 1999-2004, 2006-2007, 2008-present.
- Member of the MIS committee, 1998-2001.
- Member of Graduate Committee, 1998-2000.
- Member of the Department Undergraduate Committee, 2001-2005.
- Chair of the Department Scholarship Selection Committee, 1999-2001.

College of Business Administration, UIC

- UIC IT Governance Committee member, 2011.
- Director of CBA Undergraduate Programs, 2009-2011.
- Member of the CBA Executive Committee, 2005-present.
- Member of the CBA Undergraduate Committee, 2004-2008.
- Member of the CBA Student Relations Committee, 2001-2004.
- Member of the CBA Research Committee. 1998-99.
- Member of the CBA Coordinating Committee, 1999-2000.

#### Key initiatives:

- As Director of CBA Undergraduate Programs, 2009-2011:
  - establishing interdisciplinary Minors in Managerial Skills, Product Development, Business Analytics
  - establishing a Professional Development Program
  - college-wide analyses of deployment of teaching resources and AACSB accreditation requirements
- As Director of IDS Undergraduate Studies, initiated and led the efforts for:
  - establishing of Minors in Management Information Systems, Operations Management, Business Statistics, 2008.
  - revision to the undergraduate IDS major program to integrate better with other business disciplines, 2007.
- As head of the MIS Committee, initiated and led a committee for major revision of the MS-MIS program, 2005, with updated course and project work to match changing technologies and business needs.
- Capstone projects requirement for MS-MIS program, 2005-2010, establishing industry contacts, organizing and managing projects with various Chicago-area companies.

#### **Professional**

- Editorial Board, Electronic Commerce Research and Applications Journal, 2009-present.
- Editorial Board, Journal of Database Marketing and Customer Strategy Management, 1998-present.
- Guest Editor, with GJ. Koehler, Decision Support Systems Journal, Special Issue on Web Data Mining, Volume 35, Issue 2, (May 2003).

Member of the Institute for Operations Research and the Management Sciences (INFORMS), IEEE.

#### **Ad-hoc Refereeing**

Decision Support Systems, Information Systems Research, MIS Quarterly, Decision Sciences, Journal of Economic Behavior and Organization, Evolutionary Computation, European Journal of Operations Research, Annals of Operations Research, IEEE Intelligent Systems, IEEE Transactions on Evolutionary Computation, IEEE Journal of Manufacturing Systems, IEEE Transactions on Engineering Management, Intelligent Systems in Accounting, Finance and Management, Information Science, Knowledge and Information Systems, Data Base, Journal of Forecasting, Production and Operations Management, IIE Transactions.

Reviewer for various conferences and workshops, including International Conference on Information Systems (ICIS), Hawaii International Conference on Systems Sciences (HICSS), Decision Sciences Institute Annual Meeting (DSI), Workshop on Information Technology and Systems (WITS), Knowledge Discovery and Data Mining (KDD), Genetic and Evolutionary Computation Conference (GECCO), IEEE International Conference on Data Mining (ICDM), European Conference on Evolutionary Computation, Association for the Advancement of Artificial Intelligence (AAAI) Conference, International Conference on Autonomous Agents and Multiagent Systems, etc.

- Program Committee, IEEE International Conference on Social Computing, Amsterdam, 2012.
- Program Committee, ASE/IEEE international Conference on Social Informatics, Washington, DC, 2012.
- Program Committee, Workshop on Information Technology and Systems (WITS-2011), Orlando, 2012.



- Associate Editor, **Knowledge Management and Business Intelligence** track, International Conference on Information Systems, Orlando, 2012.
- Program Committee, Workshop on Information Technology and Systems (WITS-2011), Shanghai, 2011.
- Program Committee, Workshop on Information Technology and Systems (WITS-2010), St.Louis, 2010.
- Program Committee, Workshop on Information Technology and Systems (WITS-2009), Phoenix, 2009.
- External reviewer for Advanced Program and Project Management course for Technology Management program at George Mason University, 2009.
- Program Committee, Workshop on Information Technology and Systems (WITS-2008), Paris, 2008.
- Program Committee, 7<sup>th</sup> International Conference on Computational Intelligence in Economics and Finance (CIEF08).
- Program Committee, Workshop on Information Technology and Systems (WITS-2007), Montreal, 2007.
- Session Chair, Reinforcement Learning in Business and Economics, INFORMS National Meeting, Seattle, November, 2007.
- Program Committee, 6<sup>th</sup> International Conference on Simulated Evolution and Learning (SEAL06), Hefei, China, 2006.
- Program Committee, Workshop on Information Technology and Systems (WITS-2006), Milwaukee, 2006
- Member, IEEE Data Mining Task Force, 2005.
- Program Committee member, Workshop on Information Technology and Systems (WITS-2005), Las Vegas, 2005.
- Program Committee member, 4<sup>th</sup> International Workshop on Computational Intelligence in Economics and Finance (CIEF-2005), Salt Lake City, Utah, 2005.
- Program Committee, Workshop on Information Technology and Systems (WITS-2004), Washington DC, 2004.
- Program Committee, Workshop on Information Technology and Systems (WITS 2003), December 2003.
- Program Committee, The 3<sup>rd</sup> International Workshop on Computational Intelligence in Economics and Finance (CIEF'2003), September 2003.
- Program Committee, The 2<sup>nd</sup> International Workshop on Computational Intelligence in Economics and Finance (CIEF'2002), Research Triangle Park, North Carolina, March 8-13, 2002.
- Program Committee, 2002 Information Resources Management Association (IRMA) International Conference, May 19-22, 2002, Seattle, Washington.
- Program Committee, Workshop on Data Mining for Marketing Applications, Joint 12th European Conference on Machine Learning (ECML'01), Freiburg, Germany, September 3-7, 2001.
- Program Committee, The First International Workshop on Computational Intelligence in Economics and Finance (CIEF'2000), Atlantic City, New Jersey, February 27-March 3, 2000.
- Track Chair, DSS/AI/Expert Systems for the 31<sup>st</sup> Annual Meeting of the Decision Sciences Institute, November, 18-21, 2000, Orlando, FL.
- Coordinator for Technical Sessions, College of Artificial Intelligence, INFORMS Spring 2000 Meeting, Salt Lake City, Utah, May 2000.
- Cluster Chair, College of Artificial Intelligence, INFORMS Spring 1999 Meeting, Philadelphia, Nov 7-10, 1999.
- Program Committee, INFORMS Information Systems and Technology Conference, San Diego, May, 1997.
- Session Chair, Data Mining, INFORMS National Meeting, Montreal, 1998.
- Session Chair, Practice and Applications of AI, INFORMS National Meeting, New Orleans, October, 1995.