Xue Bai

Contact Information	University of Connecticut, School of Business 2100 Hillside Road, Office 383 Office: (860) 486-8061 Storrs, CT 06269 USA E-mail: xue.bai@uconn.edu

Academic Position

Associate Professor with Tenure   Aug 2012 - present
Operations and Information Management
School of Business
University of Connecticut, Storrs, CT USA

Assistant Professor   Aug 2007 - Aug 2012
Operations and Information Management
School of Business
University of Connecticut, Storrs, CT USA

Academic Affiliation

Faculty Member
NSA Center for Info. Assurance and Computer Sys. Security   Oct 2009 - present
School of Business
School of Engineering
University of Connecticut, Storrs, CT USA

Industry Experience

Research Internship   Jun – Aug 2005
Business and Analytics Division, IBM Research, Thomas J. Watson Center, NY.

Research Consultant   May 2005
PricewaterhouseCoopers LLP, Center for Advanced Research, CA

Education

Ph.D. Management Information Systems,   Aug 2007

School of Information Systems and Management
The H. John Heinz III College
Carnegie Mellon University, Pittsburgh, Pennsylvania USA

M.S. Data Mining and Machine Learning,   May 2005

The School of Computer Science
Carnegie Mellon University, Pittsburgh, Pennsylvania USA

M.Phil. Management Science and Information Systems,   Dec 2002

School of Information Systems and Management
The H. John Heinz III College
Carnegie Mellon University, Pittsburgh, Pennsylvania USA

B.S. Management Information Systems,   Jul 2000

1

The School of Economics and Management
Tsinghua University, Beijing, China

RESEARCH
INTERESTS

Mathematical modeling, optimization, and risk analysis
Online social networks and online communities
Data mining and business analytics

REFEREED
JOURNAL
ARTICLES

X. Bai, R. D. Gopal, M. Nunez, D. Zhdanov. 2014. A Decision Methodology for Managing Operational Efficiency and Information Disclosure Risk in Healthcare Processes. ***Decision Support Systems***. **57**(1) pages 406–416, 2014.

X. Bai, R. Krishnan, R. Padman, H. Wang. 2013. On Risk Management with Information Flows in Business Processes. ***Information Systems Research***. **24**(3) pages 731–744, 2013.

X. Bai. 2012. A Mathematical Framework for Data Quality Management in Enterprise Systems. 2012. ***INFORMS Journal on Computing***. **24**(4) pages 648–664, 2012.

X. Bai, R. D. Gopal, M. Nunez, D. Zhdanov. 2012. On The Prevention of Fraud and Privacy Exposure in Process Information Flow. ***INFORMS Journal on Computing***. **24**(3) pages 416–432, 2012.

X. Bai, M. Nunez, J. Kalagnanam. 2012. Managing Data Quality Risk in Accounting Information Systems. ***Information Systems Research***. **23** (3) pages 453–473, 2012.

X. Bai, M. Luo. 2011. How Much is Trust Worth: Evidence from the International Online Textbook Market. ***Journal of Internet Commerce***. **10**(4) pages 241–252, 2011.

E. M. Airoldi, X. Bai, C. Carley. 2011. Network Sampling and Classification: An Investigation of Network Model Representations. ***Decision Support Systems***. **51**(3) pages 506-518, 2011.

E. M. Airoldi, X. Bai, B. Malin. 2011. An Entropy Approach to Disclosure Risk Assessment: Lessons from Real Applications and Simulated Domains. ***Decision Support Systems***. **51**(1) pages 10-20, 2011.

X. Bai, 2011. Predicting Consumer Sentiments from Online Text. ***Decision Support Systems***. **50**(4) pages 732-742, 2011.

X. Bai, R. D. Gopal, M. Nunez, D. Zhdanov. 2010. Managing Information Security Risk in Business Processes. ***International Journal of Decision Sciences***. **1**(1) pages 45-53, 2010.

X. Bai, R. Padman, J. D. Ramsey, P. Spirtes. 2008. Tabu Search Enhanced Graphical Models for Classification in High Dimensions. ***INFORMS Journal on Computing*** **20**(3) pages 423-437, 2008.

CURRENT WORK
X. Bai, Y. Yao. Facebook on Campus: The Effect of Environmental and Social Factors on the Adoption of Social Network Sites.

X. Bai, S. Bhattacharjee, F. Boylu, R. D. Gopal. Improving Multiple Store Product Portfolios and Performance: A Data Mining and Optimization Based Decision Model.

L. Du, X. Bai, M. A. Nunez. Pricing Strategy and Capacity Planning in Cloud Computing Markets.

K. Zhao, B. Zhang, X. Bai. Virtual Inter-organizational Communities of Practice: A Multilevel Framework of Individual Motivation of Participation.

Z. Li, X. Fang, X. Bai, O. R. L. Sheng. Utility-based Link Recommendation for Online Social Networks.

T. Phan, P. Bhattacharya, X. Bai, E. M. Airoldi. The Evolution of Valuable Users on Online Social Networks: An Empirical Study of a Large Panel Data from a Behavior Chain Perspective.

H. J. Wang, J. Li, X., Bai. Towards an Intelligent Approach to Extracting Data for Process Mining.

X. Bai, J. Marsden, W. Ross, Q. Wang. Relationships among Minimum Requirements, Facebook Likes, Quantity of Coupons Sold, and Total Revenue.

Q. Li, X. Guo, X. Bai. Weekdays or Weekends: Exploring the Relationships between Microblog Posting Patterns and Addiction.

HONORS AND
AWARDS
Ackerman Scholar Award. *UConn School of Business.* 2014–2016.

Research Excellence Award. *UConn School of Business.* 2013.

Best Paper Award. *UConn School of Business.* 2011.
– X. Bai, M. Nunez, J. Kalagnanam. Managing Data Quality Risk in Accounting Information Systems.

Best Instructional Technology Award. *The 20th Workshop on Information Technologies and Systems* (WITS)2010.
– X. Bai, H. J. Wang. Process Analysis and Design using Process Management Systems.

Doctoral Fellowships. Carnegie Mellon University. 2000-2007.

GuSH Foundation Award. Carnegie Mellon University. 2005.

Student Conference Travel Award. Carnegie Mellon University. 2004.

Distinguished Undergraduate Student Award. Tsinghua University, China. 1996-2000.

Chinese National Mathematics Olympic Competition, First Class prize. China. 1995.

GRANTS	National Natural Science Foundation of China Grant No. 71301163.	2014-2016
	National Natural Science Foundation of China Grant No. 71202121.	2013-2015
	Connecticut Information Technology Institute Research Grant	2013, 2014
	UConn School of Business Dean's Research Grant	2012
	Connecticut Information Technology Institute Research Grant	2009, 2010, 2011

REFEREED CONFERENCE PROCEEDINGS

Q. Li, X. Guo, X. Zhao, X. Bai. Weekdays or Weekends: Exploring the Relationships between Microblog Posting Patterns and Addiction. In *Proceedings of the 34th International Conference on Information Systems (ICIS2013)*, Milan, Italy, December 14-15, 2013.

H. J. Wang, J. Li, X., Bai. Towards an Intelligent Approach to Extracting Data for Process Mining. Proceedings of the *SIGBPS Workshop on Business Processes and Services*. December 13-14, 2012.

X. Bai, S. Bhattacharjee, F. Boylu, R. D. Gopal. Improving Multiple Store Product Portfolios and Performance: A Data Mining and Optimization Based Decision Model. *The Eighth Symposium on Statistical Challenges in Electronic Commerce Research (SCECR2012)*, Montreal CA. June 27, 2012.

X. Bai, R. D. Gopal, M. Nunez, D. Zhdanov. 2010. A Decision Methodology for Managing Operational Efficiency and Information Disclosure Risk in Healthcare Processes. *Workshop on Healthcare and IT*, University of Florida, Gainesville, FL, February 11-12, 2011.

X. Bai, H. J. Wang. 2010. Process Analysis and Design using Process Management Systems. *Proceedings of the 20th Workshop on Information Technologies and Systems (WITS 2010)*, St. Louis, Missouri, December 11-12, 2010.

X. Bai, R. D. Gopal, M. Nunez, D. Zhdanov. 2010. On The Prevention of Fraud and Privacy Exposure in Process Information Flow. *Proceedings of the Conference on Information Systems and Technology (INFORMS CIST 2010)*. Austin, Texas. November 6-7, 2010.

X. Bai, R. D. Gopal, M. Nunez, D. Zhdanov. Reducing Privacy Exposure in Healthcare Workflows. *The Workshop on Health IT and Economics (WHITE 2010)*. Washington, DC. October 8-9, 2010.

X. Bai, Y. Yao. 2009. Facebook on Campus: the Use and Friendship Formation in Online Social Networks. In *Proceedings of the Eighth Workshop on eBusiness (WeB09)*, Phoenix, AZ, Dec 15, 2009.

X. Bai, Y. Yao. 2009. Campus vs. Facebook: When Do Offline Communities Meet Online? *The Fifth Symposium on Statistical Challenges in Electronic Commerce Research*

(SCECR2009), Carnegie Mellon University, Pittsburgh, PA. May 30, 2009.

X. Bai, R. Krishnan, R. Padman. 2008. On Risk Management in Business Information Flow: A Process-Modeling Approach. In: *Proceedings of the 5th Workshop on Secure Knowledge Management (SKM 2008)*. Dallas, TX page 20-21.

R. Padman, X. Bai, E. M. Airoldi. 2007. A New Machine Learning Classifier for High Dimensional Healthcare Data. In: *Medinfo 2007: Proceedings of the 12th World Congress on Health (Medical) Informatics; Building Sustainable Health Systems*. Kuhn, Klaus A (Editor); Warren, James R (Editor); Leong, Tze-Yun (Editor). Amsterdam: IOS Press, 2007. Studies in health technology and informatics, ISSN 0926-9630. pages: 664-668

X. Bai, R. Krishnan, R. Padman. 2007. Design of Risk Management Strategies in Business Process Information Flow. In *Proceedings of the 28th International Conference on Information Systems (ICIS2007)*, Montreal, Qubec, Canada, December 9-12, 2007.

X. Bai, R. Krishnan, R. Padman. 2006. Risk Management Models for Business Process Design. In *Proceedings of the 5th Workshop on e-Business (WeB2006)*, page 48-53.

S. Bagchi, X. Bai, J. Kalagnanam. 2006. Data Quality Management using Business Process Modeling. In *Proceedings of IEEE International Conference on Services Computing (SCC2006)*, IEEE Services Computing, page 398-405.

X. Bai, R. Padman, E.M. Airoldi. 2005. On Learning Parsimonious Models for Extracting Consumer Opinions. In *Proceedings of the 38th Hawaii International Conference on System Science (HICSS)*, IEEE Computer Society, page 75.2.

X. Bai, P. Spirits, R. Padman. 2005. Tabu Search Enhanced Markov Blanket Classifier for High Dimensional Data Sets. In B. Golden, S. Raghavan, and E. Wasil, editors, *The Next Wave in Computing, Optimization, and Decision Technologies, Operations Research and Computer Science Interfaces Series*. Vol. 29, page 337-354, Kluwer Academic Publisher.

X. Bai. 2004. Internet enabled arbitrage: Evidence from the international online textbook market. In *Proceedings of the 8th INFORMS Conference of Information Systems and Technology(INFORMS CIST 2004)*.

INVITED TALKS   A Data Mining Approach for Improving Branch Product Portfolio and Performance
INFORMS Analytics Conference. Florida, April 2012

Link Recommendation for Contagious Behavior in Online Social Networks
INFORMS Annual Meeting, Charlotte NC, 2011

A Decision Methodology for Managing Operational Efficiency and Information Disclosure Risk in Healthcare Processes
INFORMS Annual Meeting, Charlotte NC, 2011

An Empirical Analysis of the Adoption of Facebook on Campus

INFORMS Annual Meeting, Austin TX, 2010

Managing Data Quality Risk in Accounting Information Systems
INFORMS Annual Meeting, Austin TX, 2010

On the Prevention of Fraud and Privacy Exposure in Business Information Flow
INFORMS Annual Meeting, Austin TX, 2010

Security-Constrained Workflow Models: A Case of Health Care Process.
INFORMS Annual Meeting, Washington DC, October 2008

Design of Risk Management Strategies in Business Process Information Flow
INFORMS Annual Meeting, Seattle, WA, November 2007

Risk Management Models in Business Process Design
SAMSI, Workshop on RISK: Perception, Policy and,Practices Workshop, Research Triangle Park, NC, October 2007

Tabu Search Enhanced Graphical Models for Classification of Health Care Data
DIMACS, Workshop on Data Mining, Systems Analysis, and Optimization in Neuroscience, University of Florida, Gainseville, FL, February 2006

Enhanced Graphical Models for Classification of High Dimensional Data
Optimization and System Seminar, **Leeds School of Business**, University of Colorado at Boulder, CO, November 2005

Extracting Sentiment from Unstructured Text
Center for Advanced Research, PricewaterhouseCoopers LLP, San Jose, CA, May 2005

Tabu Search Enhanced Graphical Models for Classification of Health Care Data, the Center for Biomedical Informatics, **University of Pittsburgh**, Pittsburgh, PA, March 2005

Tabu Search Enhanced Markov Blanket Classifier for High Dimensional Data Sets
The Winter Information Systems Conference, Salt Lake City, UT, February 2005

Extracting Sentiment from Unstructured Text
Clairvoyance Corporation, Pittsburgh, PA, June 2004

Extracting Sentiment from Unstructured Text
Machine Learning Seminar, **Center for Automated Learning and Discovery**, Carnegie Mellon University, PA, January 2004

PRESENTATIONS   A Data Mining Approach for Improving Branch Product Portfolio and Performance
The Eighth Utah Winter Information Systems Conference. Salt Lake City, Utah, March 2012.

Risk Management Models in Business Process Design
INFORMS Annual Meeting, Pittsburgh, PA, November 2006

On Risk Management in Business Process Modeling
INFORMS Meeting International, Hong Kong, China, June 2006

Data Quality Assessment in Business Process Modeling
IBM Research, Thomas J. Watson Center, Yorktown Heights, NY, August 2005

Tabu Search Enhanced Markov Blanket Classifier for Large Data Sets with Few Cases
INFORMS Annual Meeting, Denver, CO, October 2004

Learning Bayesian Networks Using Tabu Search Heuristic
INFORMS Annual Meeting, Atlanta, GA, October 2003

PATENT	Patent No. US 20070198312 A1	August 23 2007

Title "Quality Management Model using Business Process Modeling"
with Bagchi S. and Kalagnanam J., Business & Analytics Division, IBM Research, Thomas J. Watson Center

TEACHING EXPERIENCE

Instructor
School of Business, **University of Connecticut**

1. *Business Information Systems (3103 and 203C)*	Fall 2007 - present

– An undergraduate core course for required of business majors

2. *Database Management Systems (3221)*	Fall 2009 - present

– A capstone course for the MIS major

Teaching Fellow
The H. John Heinz III College, **Carnegie Mellon University**

1. *Telecommunications Management (95-705)*	Spring 2007

– A core course for Master Program in Information Systems Management
– Regular teaching assistance duties and lab sessions.

2. *Database Systems for Managers (95-703)*	Fall 2006

– A core course for Master Program in Information Systems Management
– Regular teaching assistance duties and lab sessions.

3. *Electronic Commerce (95-730)*	Spring 2006

– A core course for Master Program in Information Systems Management
– Giving the demonstration on the business process modeling tools (IBM Websphere and BPEL) for business process analysis, design, and process integration into web services.

4. *Decision Support Systems (95-709)*	Spring 2005

– A course for Master Program in Public Policy and Management

– Conducting lab sessions and weekly review sessions.

Teaching Assistant (All Masters Level Courses)
The H. John Heinz III College, **Carnegie Mellon University**

1. *Data Structures & Algorithms* (95-771)   Fall 2004, Fall 2003, Summer 2004

2. *Data Mining* (95-791)   Summer 2004

3. *Electronic Commerce* (95-730)   Spring 2003, Summer 2003

4. *Telecommunications Management* (95-705)   Fall 2003, 2006
– distance learning course for General Motors Managers

5. *Information Security Management* (95-752)   Summer 2003
- distance learning course for General Motors Managers

6. *Operations Research* (90-772)   Spring 2003

7. *Cost Benefit Analysis* (90-747)   Fall 2002

8. *Database Management* (95-703)   Spring 2002, Fall 2001, Summer 2001

Guest Lecturer
The H. John Heinz III College, **Carnegie Mellon University**   Spring 2005, 2006

1. *Health Care Information Systems (91-853)*
– A core course for Master Program in Health Care Management
– I taught the "data mining techniques for health care decision support" module. The course material covers the basic data mining methods and technical tools. Case studies and discussion are conducted in class.

SERVICES   **Service to the Academic Community**

1. Editorial Services

   Associate Editor, *Information Systems Research*, 2013 - present
   Associate Editor, *International Conference on Information Systems* (ICIS), 2013

2. Reviewer for Journals

   Information Systems Research,
   Management Science,
   MIS Quarterly,
   INFORMS Journal on Computing,
   Decision Support Systems,

IEEE Systems, Man and Cybernetics,
ACM Transactions on Management Information Systems,
Decision Sciences Journal,
Journal of Database Management,
Electronic Commerce Research and Applications,
Information Systems Management

3. Reviewer for Conference Proceedings

   ICIS 2007, ICIS 2008, ICIS 2009, ICIS 2010, ICIS 2011
   WITS 2006, WITS 2007, WITS 2008, WITS 2009, WITS 2010, WITS 2011, WITS 2012
   CIST 2008, CIST 2009, CIST 2010, CIST 2011, CIST 2012
   ECIS 2009 (The 18th European Conference on Information Systems)
   PACIS 2007

4. Invited Program Committee Member

   WITS 2008, WITS 2009, WITS 2010, WITS 2011
   CIST 2009, CIST 2010, CIST 2011

5. Invited Session Chair

   WITS 2009, WITS 2010, WITS 2011
   CIST 2009, CIST 2010, CIST 2011

Student Advising

1 *PhD Committee Member and Co-Advisor*   December 2010 - present
  – Lionel Li, PhD candidate, Department of Operations and Information Systems,
  David Eccles School of Business, University of Utah.

2 *PhD Committee Member and Co-Advisor*   December 2011 - present
  – Gang Wang, PhD candidate, Department of Operations and Information Systems,
  School of Business, University of Connecticut.

3 Major advisor,   March 2011 - present
  – Masters Program in Business Analytics and Project Management (MSBAPM).

4 Supervisor,   Fall 2008 - present
  – Honors course projects in undergraduate business majors.

5 Faculty advisor,   Fall 2007 - present
  – Undergraduate advising of MIS students.

Service to the Department of Operations and Information Management

1. PhD recruiting Committee,   Fall 2012 - present

2. MSBAPM recruiting Committee,   Fall 2012 - present

3. MSBAPM outreach Committee,   Fall 2012 - present

4. Coordinator, OPIM Department seminar,   Fall 2008 - present

5. Co-Organizer and Host, CIO lecture series,   Fall 2007 - present

6. MIS Social and career fair,   Fall 2008 - present

7. MIS Scholarships and MIS Certificate ceremonies,   Spring 2009 - present

8. Business School Open Houses and the University Open Houses,   Fall 2008 - present

9. Undergraduate MIS Scholarship and Awards Committee,   Spring 2009 - present

10. Participant, MIS Program website redesign.   Spring 2011

11. Design and promotion of the Certificate in MIS.   Fall 2008, Fall 2009

12. Ph.D. Qualifying exams preparation and grading.   Spring 2008- present

13. The OPIM-ESPN Partnership event.   April 17, 2011

14. The OPIM-MEM Banquet events.   April 21, 2010 and April 26, 2011

15. Co-Organizer, School of Business PhD Program external speaker series,   2011, 2012

16. Partnership events with the Hartford Insurance Group.   Spring 2010

17. Organizer, MIS major lecture series at the Honors dorms.   Fall 2008

Service to the School of Business and the University

1. Department Representative,   May 2008, May 2010
   – University Graduation Commencements.

2. Department Representative,   May 2011
   – Undergraduate Commencement, School of Business.

3. Department Representative,   August 2008, August 2009
   – University Convocation.

4. Department Representative,   December 2007
   – Winter University Graduation Commencement.

5. Faculty advisor, Fall 2008 - present
   – Asian Christian Student Association, University of Connecticut.