Xue Bai

CONTACT
INFORMATION

Temple University, Fox School of Business
1810 Liacouras Walk, Office 274
Philadelphia, PA 19122

Office: (215) 204-4164
E-mail: xue@temple.edu

ACADEMIC
POSITION

Professor
Milton F. Stauffer Senior Research Fellow   Jul 2022 - present
Department of Statistics, Operations, and Data Science

Associate Professor with Tenure
Milton F. Stauffer Senior Research Fellow   Jul 2018 - Jul 2022
Department of Management Information Systems
Department of Marketing and Supply Chain Management
Fox School of Business
Temple University Philadelphia, PA USA

Associate Professor with Tenure   Aug 2012 - Jul 2018
Department of Operations and Information Management
School of Business
University of Connecticut, Storrs, CT USA

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

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

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

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	
RESEARCH INTERESTS	Data analytics and data mining Mathematical modeling and optimization Online social networks and online platforms	
TEACHING INTERESTS	Management Information Systems Database Management Data mining and Business Analytics	

REFEREED
JOURNAL
ARTICLES

H. Li, J. Peng, G. Wang, X. Bai. The Impact of Process- vs. Outcome-Oriented Reviews on the Sales of Healthcare Services. ***Information Systems Research***. **35**(4): pages 1909–1927, December 2024.

L. Lee, Y. Ge, X. Bai. 2021. What Will Be Popular Next? Predicting Hotspots in Two-mode Social Networks. ***Management Information Systems Quarterly***. **45**(2). pages 925–966. June 2021.

M. A. Nunez, X. Bai, L. Du. 2021. Leveraging Slack Capacity in IaaS Contract Cloud Services. ***Production and Operations Management***. Volume **30**(4). Pages 883–901. April 2021.

X. Bai, J. Marsden, W. Ross, G. Wang. 2020. A Note on the Impact of Daily Deals on Local Retailers' Online Reputation: Mediation Effects of the Consumer Experience. ***Information Systems Research***. **31**(4): pPages 1132–1143. December 2020.

P. Bhattacharya, T. Phan, X. Bai, E. M. Airoldi. 2018. A Co-Evolution Model of Network Structure and User Behavior in Online Social Networks: The case of Network-Driven Content Generation. ***Information Systems Research***. **30**(1): pages117–132, March 2019.

K. Zhao, B. Zhang, X. Bai. 2018. Estimating Contextual Motivating Factors in Virtual Inter-organizational Communities of Practice: Peer Effects and Organizational Influences. ***Information Systems Research***. **29**(4): pages 910–927. December 2018.

Q. Li, X. Guo, X. Bai. W. Xu, 2018. Investigating microblogging addiction tendency through the lens of uses and gratifications theory. ***Internet Research***. **28**(5), pages 1228–1252, July 2018.

X. Bai, J. Marsden, W. Ross, G. Wang. 2017. How e-WOM and local competition drive local retailers' decisions about daily deal offerings ***Decision Support Systems***. **101**: 82–94, September 2017.

Q. Li, X. Guo, X. Bai. 2017. Weekdays or Weekends: Exploring the Relationships between Microblog Posting Patterns and Addiction. *Information and Management*. **54**(5), pages 613–624, June 2017.

Z. Li, X. Fang, X. Bai, O. Sheng. 2017. Utility-based Link Recommendation for Online Social Networks. *Management Science*. **63**(6), pages 1938–1952, May 2017.

H. J. Wang, J. Li, X., Bai. 2015. An Intelligent Approach to Data Extraction and Task Identification for Process Mining. *Information Systems Frontier*. **17**(6) pages 1195–1208, June 2015.

X. Bai, S. Bhattacharjee, F. Boylu, R. D. Gopal. 2015. Growth Projections and Assortment Planning of Commodity Products Across Multiple Stores: A Data Mining and Optimization Approach. *INFORMS Journal on Computing*. **27**(4) pages 597–808, October 2015.

X. Bai, J. Marsden, W. Ross, G. Wang. 2015. Relationships among Minimum Requirements, Facebook Likes, Quantity of Coupons Sold, and Total Revenue. *ACM Transactions on Management Information Systems*. **6**(3) pages 9:1–28, 2015.

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, January 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, September 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.

PAPERS
UNDER REVIEW

Correlated maturity curves regression: Predicting lifetime value in massive online advertising campaigns. working paper. With E. Airoldi and J. Bishop.

HONORS AND
AWARDS

Research Excellence Award. Department of Marketing and Supply Chain Management. Fox School of Business. Temple University. 2020-2021.

Excellence in Research Awards. Fox School of Business. Temple University. 2019-2020.

Milton F. Stauffer Senior Research Fellow. Temple University. 2018 - 2024.

INFORMS ISS Design Science Award. 2016.

Ackerman Scholar Award. UConn School of Business. 2014–2016.

5-Year Research Excellence Award. UConn School of Business. 2013.

Best Research Paper Award. UConn School of Business. 2011.

Best Instructional Technology Award. The 20th Workshop on Information Technologies and Systems (WITS) 2010.

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 (CITI) Research Grant	2013-2016

UConn School of Business Dean's Research Grant   2012

Connecticut Information Technology Institute (CITI) Research Grant   2009-2011

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

REFEREED   H. Li, G. Wang, J. Peng, X. Bai. Impacts of Online Diaries on Sales of Credence Goods:
CONFERENCE   Evidence from a Cosmetic Surgery Platform?   *The Fifteenth Symposium on Statistical*
PROCEEDINGS   *Challenges in Electronic Commerce Research (SCECR2019)*, Hong Kong, China, June 11-
                      12, 2019.

                      H. Li, G. Wang, J. Peng, X. Bai. Impacts of Online Diaries on Sales of Credence Goods:
                      Evidence from a Cosmetic Surgery Platform? *Proceedings of the Conference on Information*
                      Systems and Technology (INFORMS CIST 2018), San Francisco, CA, November 11-12,
                      2018.

                      K. Zhao, B. Zhang, X. Bai. Who Motivates My Participation in Virtual Interorganizational
                      Communities of Practice: Self, Peers, or the Firm? In *Proceedings of the 37th International*
                      Conference on Information Systems (ICIS2016), Dublin, Ireland, December 11-14, 2016.

                      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 Pro-
                      cess 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 Portfo-
                      lios and Performance: A Data Mining and Optimization Based Decision Model.   *The Eighth*
                      Symposium on Statistical Challenges in Electronic Commerce Research (SCECR2012), Mon-
                      treal 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 Pri-
                      vacy 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, 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. Spirts, 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)*.

TEACHING EXPERIENCE	**Fox School of Business, Temple University**

1. Masters-Level Courses

Data: Care, cleaning and feeding using Python (STAT5606)   Fall 2021 - Spring 2022
    – A core course for the MS in Business Analytics

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2. Undergraduate-Level Courses

Quantitative Methods for Business II (STAT1102)   Fall 2022 - Spring 2023
– An undergraduate core course for required of business majors
– Regular and Virtual sessions

Data Management and Business Analytics (SCM3507)   Spring 2024 - present
– A required course for Supply Chain Management majors and an elective course for other business majors

Information Systems in Organizations (MIS2101)   Fall 2018 - Spring 2022
– An undergraduate core course for required of business majors
– Regular and Virtual sessions

Information Management for Marketing Strategies (MKTG3502)   Fall 2019 - Spring 2022
– An elective course for business majors
– Regular, Hybrid, and Virtual sessions

School of Business, University of Connecticut

1. Masters-Level Courses

Database Management and Business Process Modeling (OPIM5272)   Fall 2014 - Spring 2018
– A core course for the MS in Business Analytics and Project Management program

Data Mining and Business Intelligence (OPIM5671)   Spring 2017 - Spring 2018
– A core course for the MS in Business Analytics and Project Management program

2. Undergraduate-Level Courses

Business Information Systems (OPIM3103)   Fall 2007 - Spring 2015
– An undergraduate core course for required of business majors

Database Management Systems (OPIM3221)   Fall 2009 - Fall 2013
– A capstone course for the MIS major

Business Information Systems (OPIM3103)   Fall 2007 - Spring 2015
– An undergraduate core course for required of business majors

Database Management Systems (OPIM3221)   Fall 2009 - Fall 2013
– A capstone course for the MIS major

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

Services at the Temple University

1. Service to the Department of Marketing and Supply Chain Management

1. Faculty Tenure and Promotion Committee	Fall 2018 - present
2. Ph.D. Evaluation Committee	Fall 2018 - present
3. Marketing Faculty Recruiting Committee	Fall 2018 - present
4. Supply Chain Faculty Recruiting Committee	Fall 2018 - present
5. Supply Chain Ph.D. Student Admission Committee	Fall 2018 - present
6. SODS Graduate Program Committee	Fall 2018 - present

2. Service to the Fox School and the University

1. School Budget Committee	Fall 2023 - present
2. Annual Student Research Competition Evaluation	Fall 2018 - Fall 2020
3. Faculty Research Collaboration Committee	Fall 2018 - Fall 2019

Ph.D. Student Advising

1 *PhD Committee Member and Co-Advisor, 2013*
 – Lionel Li, currently tenured Associate Professor of MIS at
 Schulich School of Business, York University

2 *PhD Committee Member and Co-Advisor, 2015*
 – Gang Wang, currently tenured Associate Professor of MIS at
 Lerner College of Business & Economics, University of Delaware

3 *PhD Committee Member and Co-Advisor, 2019*
 – Yucheng Chen, currently visiting Assistant Professor of OPIM at
 the School of Business, University of Connecticut

Undergraduate Student Advising

1 Supervisor,   Fall 2008 - Fall 2016
  – Honors course projects in undergraduate business majors

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

Service to the Academic Community

1. Editorial Services

   Associate Editor, *Decision Support Systems*, 2017 - present
   Senior Editor, *Production and Operations Management*, 2019 - present
   Associate Editor, *INFORMS Journal on Data Science* (IJDS), 2020 - present
   Associate Editor, *Information Systems Research*, 2013 - 2019
   Associate Editor, *International Conference on Information Systems* (ICIS), 2013, 2015

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

   International Conference on Information Systems (ICIS)
   Workshop on Information Technologies and Systems (WITS)
   Conference on Information Systems and Technology (CIST)
   European Conference on Information Systems (ECIS)
   Pacific Conference on Information Systems(PACIS)

Services at UCONN

1. Service to the Department of Operations and Information Management

1. Faculty Recruiting Committee (both Tenure track and In-residence),   2014-15; 2015-16

2. MSBAPM Curriculum Redesign Committee, 2016-present

3. PhD Committee, 2016

4. Journal Evaluation Committee, 2016-2017

5. Department PTR Committee, Fall 2015

6. Undergraduate MIS Program Committee, 2008 - 2016

7. PhD recruiting Committee, 2012

8. MSBAPM recruiting Committee, 2012 - 2016

9. MSBAPM outreach Committee, 2012 - 2013

10. Coordinator, OPIM Department seminar, 2008 - 2013

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

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

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

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

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

16. Participant, MIS Program website redesign. Spring 2011

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

18. Ph.D. Qualifying exams preparation and grading. Spring 2008- Spring 2018

2. Service to the School and the University

1. School-Level Masters Program Committee, 2015-present
   – School of Business.

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

3. Department Representative, May 2011, 2013
   – Undergraduate Commencement, School of Business.

4. Department Representative, August 2008, August 2009

    – University Convocation.

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

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