

Hsin-Min Lu

hmlu@email.arizona.edu (520)232-4556
McClelland Hall 430, 1130 E. Helen St., Tucson, Arizona 85721-0108

PRIMARY RESEARCH INTEREST

Text/Data/Web Mining

SPECIFIC RESEARCH INTEREST

Applied Econometrics
Business Intelligence
Text Mining for Business Decision Making
Medical Informatics
Empirical Finance

SPECIFIC TEACHING INTEREST

Management Information Systems
Database Management Systems
Programming Languages
Accounting Information Systems

EDUCATION

PhD Candidate in Management Information Systems Expected May 2010

University of Arizona, Tucson (GPA 3.8)

Minor: Applied Mathematics

Dissertation Title: Automatic Recognition of Risk-Related Statements in Business Documents

Dissertation Advisor: Dr. Hsinchun Chen

Committee Member: Dr. Paulo Goes, Dr. Daniel Zeng, Dr. George Jiang

MIS Core Courses:

MIS 531A Data Structure and Algorithms
MIS 541A System Analysis and Design
MIS 696A Readings in MIS
MIS 531B Database Management
MIS 507B Data Communications
MIS 611A Design Science Research Methodology
MIS 611B Topics in Research Methodology in MIS
MIS 696D Models for Quantitative Analysis

Applied Mathematics Core Courses:

Hsin-Min Lu
Ph.D. Candidate, MIS Department, University of Arizona

-Curriculum Vitae

MATH 527A Principle of Analysis
MATH 527B Principle of Analysis
MATH 564 Theory of Probability
MATH 563 Probability Math
MATH 565C Stochastic Differential Equations

Finance Core Courses:

FIN695A Investments
FIN602 Dynamic Asset Pricing

Master of Arts in Economics June 2002
National Taiwan University, Taipei

Bachelor of Business Administration June 1998
National Taiwan University, Taipei

PROFESSIONAL EXPERIENCE

Research Associate, Aug 2005 – present

Artificial Intelligence Lab, Department of MIS, University of Arizona, Tucson

Led and Involved in various projects:

1. National Science Foundation (NSF), “A National Center of Excellence for Infectious Disease Informatics” (BioPortal).
2. National Science Council (NSC), Taiwan, “The Use of Text Mining Technique in Revolutionizing Capital Market Research in Accounting: MIS and Accounting Inter-disciplines Research.”

Research Assistant, June 2004 - June 2005

Institute of Economics, Academia Sinica, Taipei

Research Assistant, February 2003 - May 2004

Graduate Institute of International Business, National Taiwan University, Taipei

Linux Programmer, May 2000 – Jan 2003

Digiopen Technology Corporation, Taipei

JOURNAL PUBLICATIONS

1. **Hsin-Min Lu**, Daniel Zeng, and Hsinchun Chen (forthcoming) “Prospective Infectious Disease Outbreak Detection Using Markov Switching Models,” IEEE Transactions on Knowledge & Data Engineering.

2. **Hsin-Min Lu**, Daniel Zeng, and Hsinchun Chen (2009) "Multilingual Chief Complaint Classification for Syndromic Surveillance: An Experiment on Chinese Chief Complaint," *International Journal of Medical Informatics*, v. 78, issue 5, 308-320.
3. **Hsin-Min Lu**, Daniel Zeng, and Hsinchun Chen (2008) "Ontology-enhanced Automatic Chief Complaints Classification for Syndromic Surveillance," *Journal of Biomedical Informatics*, v. 41, issue 2, 340-356.
4. Jow-Ran Chang, Mao-Wei Hung, Cheng-few Lee, and **Hsin-Min Lu** (2007) "The Jump Behavior of Foreign Exchange Market: Analysis of Thai Baht," *Review of Pacific Basin Financial Markets and Policies*, v. 10, no. 2, 265-288.
5. Chia-Shang J. Chu and **Hsin-Min Lu** (2006) "Random Walk Hypothesis in Exchange Rate Reconsidered," *Journal of Forecasting*, v 25, no. 4, 275-290.

JOURNAL PAPERS UNDER REVIEW

1. **Hsin-Min Lu**, Hsinchun Chen, Tsai-Jyh Chen, Mao-Wei Hung, and Shu-Hsing Li, "Financial Text Mining: Supporting Decision Making Using Web 2.0 Content," submitted to *IEEE Intelligence Systems*.
2. Kuo-Tay Chen, **Hsin-Min Lu**, Tsai-Jyh Chen, Shu-Hsing Li, Jian-Shuen Lian, and Hsinchun Chen, "Giving Context to Accounting Numbers: The Role of News Coverage," submitted to *Decision Support Systems*.
3. **Hsin-Min Lu**, Daniel Zeng, and Hsinchun Chen, "Disease Outbreak Detection Using a Markov Switching Model with Jumps," submitted to *Advances in Disease Surveillance*.

JOURNAL PAPERS IN PREPARATION

1. **Hsin-Min Lu**, Hsinchun Chen, Tsai-Jhy Chen, Paulo Goes, and Shu-Hsing Li (2009), "AZRisk: Recognizing Enterprise Risks from Business Documents." target journal: *Information Systems Research*.

BOOK CHAPTERS

1. **Hsin-Min Lu**, Daneil Zeng, and Hsinchun Chen, (2009). "Markov Switching-Based Outbreak Detection," in *Biosurveillance and Infectious Disease Informatics*, Springer.
2. **Hsin-Min Lu**, Daneil Zeng, and Hsinchun Chen, (2009). "Chief Complaint and Syndrome Mapping," in *Biosurveillance and Infectious Disease Informatics*, Springer.
3. **Hsin-Min Lu**, Chwan-Chuen King, Tsung-Shu Wu, Fuh-Yuan Shin, Jin-Yi Hsiao, Daniel Zeng, and Hsinchun Chen, (2007). "Chinese Chief Complaint Classification for Syndromic Surveillance," in *Intelligence and Security Informatics: BioSurveillance*, edited by Zeng, D., Gotham, I., Komatsu, K., Lynch, C., Thurmond, M., Madigan, D., Lober, B., Kvach, J., and Chen, H., Springer Lecture Notes in Computer Science, No. 4506.

REFERRED CONFERENCE PUBLICATIONS

1. **Hsin-Min Lu**, Nina WanHsin Huang, Shu-Hsing Li, Zhu Zhang, Tsai-Jyh Chen, and Hsinchun Chen (2009), "Recognizing Firm-Specific Risk Statements in News Articles," American Accounting Association Annual Meeting, New York.
2. **Hsin-Min Lu**, Nina WanHsin Huang, Zhu Zhang and Tsai-Jyh Chen (2009), "Identifying Firm-Specific Risk Statements in News Articles," Intelligence and Security Informatics, Bangkok, Thailand.
3. **Hsin-Min Lu**, Daniel Zeng, and Hsinchun Chen (2008) "Bioterrorism Event Detection Based on the Markov Switching Model: A Simulated Anthrax Outbreak Study," IEEE International Conference on Intelligence and Security Informatics, Taipei, Taiwan.
4. **Hsin-Min Lu**, Hsinchun Chen, Daniel Zeng, Chwan-Chuen King, Lea Trujillo, and Ken Komatsu (2007) "Multilingual Chief Complaint Classifier," Sixth Annual International Society for Disease Surveillance Conference, Indianapolis, Indiana.
5. **Hsin-Min Lu**, Daniel Zeng, and Hsinchun Chen (2006) "Ontology-based Automatic Chief Complaints Classification for Syndromic Surveillance," IEEE International Conference on Systems, Man, and Cybernetics, Taipei, Taiwan.
6. Cheng-few Lee, Jow-Ran Chang, Mao-Wei Hung, and **Hsin-Min Lu** (2004) "The Jump Behavior of Foreign Exchange Market: Analysis of Thai Baht," PBFEA 2004, Bangkok, Thailand, August 10-11 2004.

COURSE TAUGHT

Lecturer, 2009

Department of Management Information Systems, University of Arizona

MIS 304: Using and Managing Information Systems (Eller College undergraduate core course)

Enrollment: 46

Evaluation: 4.2/5.0

Topics include: data communication, database management systems, ERP, CRM, SCM, e-commerce, business intelligence systems, and information security.

Lecturer, 2008

Department of Management Information Systems, University of Arizona

MIS 373: Basic Operations Management (Eller College undergraduate core course)

Enrollment: 31

Evaluation: 3.5 / 5.0

Topics include: product and service design, capacity planning, quality management, inventory management, project management.

SPECIAL AWARDS AND HONORS

Dean's Research Award, Eller College of Management, University of Arizona, 2009

Dean's Research Award, Eller College of Management, University of Arizona, 2008

Graduate Research Assistantship, National Science Foundation, 2005-present

PROFESSIONAL ACTIVITIES

Student member of the America Accounting Association (AAA)
Student member of the Association for Information Systems (AIS)
Student member of the Association for Computing Machinery (ACM)
Student member of the Institute of Electrical and Electronic Engineers (IEEE)

Reviewed manuscripts for the following journals and conferences:

Journals:

Artificial Intelligence in Medicine, Decision Support Systems, IEEE Transactions on Intelligent Transportation Systems, Journal of Biomedical Informatics, Journal of the American Society for Information Science and Technology, Knowledge and Information Systems.

Conferences:

Conference on Information and Knowledge Management (2006), Hawaii International Conference on System Sciences (2006), IEEE International Conference on Bioinformatics and Biomedicine (2007), International Conference on Digital Government Research (2008), American Accounting Association Annual Meeting (2009), IEEE Intelligence and Security Informatics (2009), International Conference on Information Systems (2009), International Conference in Conceptual Modeling (2009).

COMPUTER SKILLS & KNOWLEDGE

Programming Language: Java, C++, C, Python, PHP, Shell Scripts (Bash), Perl, ASP, VB, VBA.

Database Systems: PostgreSQL, MySQL, MS-SQL, Oracle

Tools: R, Stata, SAS, Gauss, Matlab, Mathematica.

REFERENCES

Hsinchun Chen, Ph.D.
McClelland Professor, Department of Management Information Systems
Directors, Artificial Intelligence Lab
Eller College of Management
University of Arizona
Tucson, AZ 85721, USA
Email: hchen@eller.arizona.edu
Phone: +1 (520) 621-2748

Paulo Goes, Ph.D.
Salter Distinguished Professor in Technology and Management
Department Head, Department of Management Information Systems

Hsin-Min Lu
Ph.D. Candidate, MIS Department, University of Arizona

-Curriculum Vitae

University of Arizona
Tucson, AZ 85721, USA
Email: pgoes@eller.arizona.edu
Phone: +1 (520) 621-2429

Daniel Zeng, Ph.D.
Associate Professor, Department of Management Information Systems
Eller College of Management
University of Arizona
Tucson, AZ 85721, USA
Email: zeng@eller.arizona.edu
Phone: +1 (520)621-4614

George Jiang, Ph.D.
Associate Professor, Department of Finance
Eller College of Management
University of Arizona
Tucson, AZ 85721, USA
Email: gjiang@eller.arizona.edu
Phone: +1 (520) 621-3373