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Present Position

Associate Professor of Computer Information Systems, College of, University of Louisville

Education

Degree	Date	School	Area
Ph.D.	1992	University of Louisville	Computer Science and Engineering
M.S.	1989	University of Louisville	Computer Science

Professional Experience

8/96 – Present *Associate Professor of Computer Information Systems*, College of Business, University of Louisville

8/94 – 8/96 *Assistant Professor of Computer Information Systems*, School of Business, College of Business and Public Administration, University of Louisville

5/92 – 7/94 *Assistant Professor of Information Science and Data Processing*, College of Business and Public Administration, University of Louisville

8/90 – 5/92 *Assistant Professor of Information Science and Data Processing*, Speed Scientific School, University of Louisville

Journal Publications

1. D. Shi, J. Guan, J. Zurada, and A. Manikas. A Data-Mining Approach to Identification of Risk Factors in Safety Management Systems, *Journal of Management Information Systems*, Forthcoming.

2. Andrew Manikas, Lynn Boyd, Qinghua Pang & Jian (Jeff) Guan. (2017). An analysis of research methods in IJPR since inception. *International Journal of Production Research*, Forthcoming.

3. Guan, J., Manikas, A. S., & Boyd, L. H. (2017). The International Journal of Production Research at 55: a content-driven review and analysis. *International Journal of Production Research*, Forthcoming.

4. Guan, J., Levitan, A.S., Goyal, S. "Text Mining Using Latent Semantic Analysis: An Illustration through Examination of 30 Years of Research at JIS," forthcoming in *Journal of Information Systems*.

5. 2017, Shi, D., Guan, J., Zurada, J., Lopez-Vargas, J., and Maria del Carmen Cabrera Loayza, "A Fuzzy Neural Approach with Multiple Models to Time-dependent Short Term Power Load Forecasting Based on Weather", *International Journal of Multimedia and Ubiquitous Engineering*, 12(1), 1-6.

6. 2015, Shi, D., Zurada, J., Guan, J., and Goyal, S. "Semi-supervised Learning as an Approach to Improving Data Classification – An Illustration of Bad Debt Recovery in the Healthcare Industry", *Journal of International Technology and Information Management*, 24(4), 1-24.

7. 2015, Shi, D., Guan, J., J. Zurada, A.S. Levitan "An Innovative Clustering Approach to Market Segmentation for Improved Price Prediction," *Journal of International Technology and Information Management*, 24(1), 15-32.

8. 2014, Zurada, J., N. Keune, J. Guan "The classification performance of multiple methods and datasets: cases from the loan credit scoring domain," *Journal of International Technology and Information Management*, 23(1), 57-82.

9. 2014, Guan, J., D. Shi, J. Zurada, A.S. Levitan "Analyzing Massive Data Sets: An Adaptive Fuzzy Neural Approach for Prediction, with a Real Estate Illustration," *Journal of Organizational Computing and Electronic Commerce*, (24)1, 94-112.

10. 2013, Shi, D., J. Zurada, J. Guan "An adaptive neuro-fuzzy inference system for predicting the risks of low back disorders due to manual material lifting jobs," *Expert Systems with Applications*, 40(14), 5490-5500.

11. 2013, Guan, J., A.S. Levitan, J.R. Kuhn "How AIS Can Progress Along With Ontology Research in IS," *International Journal of Accounting Information Systems*, (March 2013), 14 (1), 21-38.

12. 2013, Gohmann, S.F., J. Guan, R.M. Barker, D.J. Faulds "Requirements Fulfillment: A Missing Link between Requirements Determination and User Acceptance," *Information Systems Management*, 30(1), 63-74.

13. 2012, Guan, J. and A.S. Levitan (2012) "A Model for Investigating Internal Control Weaknesses," *Communications of the AIS*, 31, Article 3.

14. 2011, Zurada, J., A.S. Levitan, J. Guan "Assessment of Real Estate Property Value: A Comparative Study," *Journal of Real Estate Research*, 33(3), 349-387.

15. 2010, Barker, R.M., J. Guan, S. Gohmann, D. Faulds "Requirements Bias: An Agency Theory Explanation for Sales Force Automation Implementation Success," *Communications of the ACM*, 53(7).

16. 2009, Barker, R.M., J. Guan, S. Gohmann, D. Faulds "Why is my sales force automation system failing?" *Business Horizons*, 52, 233—241.

17. 2008, Levitan, A.S., A.T. Cobb, J. Guan "Modeling an Object-Oriented Accounting System with Computer-Aided Software Engineering," *Journal of Information Systems*, 2008 Fall, 22(2), 123-140.

18. 2008, Guan, J., A.S. Levitan, J. Zurada "An Adaptive Neuro-Fuzzy Inference System Based Approach to Real Estate Property Assessment," *Journal of Real Estate Research*, 30(4), 395-420.

19. 2007, Cobb, A.T., J. Guan, A.S. Levitan "Control Considerations in Object-Oriented Systems," *Information Systems Control Journal*, Vol. 3, 2007, 1-5.

20. 2007, Faulds, D.J., J.Guan, R.M. Barker, S.F. Gohmann "Sale Force Automation Systems: The Correspondence between the Perception of Productivity Gains and the Perception of Management Control among Salespeople," *Review of Business Information Systems*, 11(2), 2007, 1-10.

21. 2006, Zurada, J., A.S. Levitan, J. Guan "Non-Conventional Approaches to Property Value Assessment," *Journal of Applied Business Research*, 22(3), 2006, 1-14.

22. 2005, Gohmann, S.F., J.Guan, R.M. Barker, D.J. Faulds "Perceptions of Sales Force Automation: Differences between Sales Force and Management," *Industrial Marketing Management*, 34(4), May 2005, 337-343.

23. 2005, Gohmann, S.F., R.M. Barker, D.J. Faulds, J.Guan "Sales Force Automation, Information Accuracy and User Satisfaction," *Journal of Business and Industrial Marketing*, Volume: 20   Issue: 1; 2005, pp. 23-32.

24. 2004, Guan, J., R.M. Barker, D.J. Faulds, S.F. Gohmann **"**Sales Force Automation Acceptance: An Exploratory Study of the Role of Job Experience," *Journal of Applied Business Research,*" Vol. 20, No. 3, pp.103-114.

25. 2002, Guan, J., W. Nunez, J.F. Welsh "Institutional strategy and information support: the role of data warehousing in higher education," *Campus Wide Information Systems*, Vol. 19, Num. 5, pp. 168 -174.

26. 2002, Guan, J., R.M. Barker "The Strategic Imperative for an Integrated Enterprise," *International Business & Economics Research Journal*, Vol. 1, No. 6, June, pp. 1-6.

27. 2001, Guan, J., A.S. Levitan "An Accounts Receivable Star Schema," *The Review of Accounting Information Systems*, Vol. 5, No. 1, Winter, pp. 31-44.

28. 1999, Srinivasan, S., J. Guan, A.L. Wright "A new CIS curriculum design approach for the 21st century," *Journal of Computer Information Systems*, Spring, v39 n3, pp. 99-106.

29. 1997, Guan, J., A.S. Levitan "Artificial Neural Network Based Assessment of Residential Real Estate Property Prices: A Case Study," *Accounting Forum*, Vol. 20, Nos. 3-4.

30. 1996, Guan, J., J.H. Graham "An Integrated Approach for Fault Diagnosis with Learning," *Computers in Industry*, 32(1), pp. 33-51.

31. 1995, Sun, G.C., J. Guan, T.L. Holloman "Factorization by Label of Magic Graphs," *Congressus Numerantium*, Volume 112, 37-44.

32. 1995, Alexander, S.M., J.H. Graham, J. Guan, W.Y. Lee "A Functional Approach to the Concurrent Design of Diagnostic Systems," *International Journal of Computers and Industrial Engineering: Special Issue*, vol. 28, No. 3, pp. 605-614.

33. 1994, Sun, G.C., J. Guan "A Labeling Algorithm for Magic Graph," *Congressus Numerantium*, Vol. 102, pp.129-137.

34. 1994, Guan, J., J.H. Graham "Diagnostic Reasoning with Fault Propagation Digraph and Sequential Testing," *IEEE Transactions on Systems, Man, and Cybernetics*, October Vol. 24, No. 10, pp. 1552-1558.

35. 1993, Graham, J.H., J. Guan, S.M. Alexander "A Hybrid Diagnostic System with Learning Capabilities," *Engineering Applications in AI*, Vol.6, No. 1, pp. 21-28.

36. 1990, Alexander, S.M., J. Guan "The Design and Development of an Automated DFA System," *International Journal of Computers and Industrial Engineering*, Vol.19, Nos. 1-4, pp. 467-471.

Book Chapters

1. 2013, "A Digraph Model for Risk Identification and Management in SCADA Systems," Intelligence Systems for Security Informatics eds Christopher C Yang; Wenji Mao; Xiaolong Zheng; Hui Wang, Academic Press, .

2. 2009, Hieb, J.L., J.H. Graham, J. Guan "An Ontological Model for Risk Management in SCADA Systems," IFIP Advances in Information and Communication Technology, Vol. 311 Palmer, Charles; Shenoi, Sujeet (Eds.) 2009, XVI, 257 p., Springer, Hardcover ISBN: 978-3-642-04797-8.

3. 2004, Jian Guan, William Nunez, John F. Welsh,"Institutional strategy and information support: the role of data warehousing in higher education," in Best

Technology Practices in Higher Education, edited by Les Lloyd, Information Today, Inc., pp. 133-143.

4. 1998, G.C. Sun, J. Guan "Standardized Moment Invariants and Their Application in a Neural Network Pattern Recognizer," in Intelligent Engineering Systems Through Artifical Neural Networks, Vol. 8,, eds. Dagli, Cihan H., et al., ASME Press, pp. 509-514.

5. 1997, J. Guan, J.H. Graham "Intelligent Diagnostics in Robotics and Integrated Manufacturing Systems," In Design and Implementation of Intelligent Manufacturing Systems, edited by H.R. Parsaei et al., Prentice-Hall, pp.65-79.

Conference Presentations/Proceedings

1. Guan, J., Hua, Y., Dos Santos, B. Garrett, R. P. Identifying the Intellectual Core of Entrepreneurship Research: A Data-Driven Approach, Atlanta, U.S.A., August 4-8, AOM Conference.

2. 2017, Donghui Shi, Jian Guan, Alan S. Levitan, Jozef Zurada, "Improving Prediction Models for Mass Assessment: A Data Stream Approach," China Summer Workshop on Information Systems, June 23-25, 2017, Nanjing, China.

3. 2017, Shi, D., Zurada, J., Guan, J. "Identification of Human Factors in Aviation Incidents Using a Data Stream Approach," HICSS 2017, Honolulu, Hawaii.

4. 2016, Shi, D., Guan, J., Zurada, J. "A Bayesian Network Approach to Classifying Bad Debt in Hospitals," HICSS 2016, Honolulu, Hawaii.

5. 2015, Shi, D., Guan, J., Zurada, J. "Cost-Sensitive Learning for Imbalanced Bad Debt Datasets in Healthcare Industry," IEEE Asia-Pacific Conference on Computer Aided System Engineering 2015, Quito, Ecuador.

6. 2014, Shi, D., Zurada, J., and Guan, J., "A Neuro-fuzzy Approach to Bad Debt Recovery in Healthcare", Proceedings of the 47th Hawaii International Conference on System Sciences (HICSS'47), (R. Sprague, Ed.), IEEE Computer Society Press, pp. 2888-2897.

7. 2013, Shi, D., J. Zurada, J. Guan "Human Factors Identification in Aviation Incidents Using Topic Mining," The 7th Summer Workshop on Information Management, June, Tianjin, China.

8. 2013, Zurada, J., Shi, D., & Guan, J. "A Fuzzy Neural Approach to Classifying Low Back Disorders Risks". In R. Sprague (Ed.), Proceedings of

the 46th Hawaii International Conference on System Sciences, IEEE
Computer Society Press, pp. 2382-2388.

9. 2011, Guan, J., J.L. Hieb, J.H. Graham "A Digraph Model for Risk
Identification and Mangement in SCADA Systems," 2011 IEEE Intelligence
and Security Informatics, 150-155, July 2011, Beijing, China.

10. 2010, Guan, J., A.S. Levitan, R. Kuhn "The Need for Semantic
Interoperability in the Financial Information Supply Chain," The Tenth (2010)
Wuhan International Conference on E-Business, Wuhan, China.

11. 2009, "A comparison of parametric and non-parametric methods to estimate
the costs of obesity, " 7th International Conference on Health Economics,
Beijing, China, July, 2009. With , Gohmann, S., Jozef Zurada.

12. 2009, "Assessment of Real Estate Property Value: A Comparative Study,"
25th Annual American Real Estate Society Meeting, Monterey, CA, April 1-4,
2009. With Zurada, J. M., Levitan, A. S.

13. 2009, "An Ontological Approach for Identifying Cyber-Induced Faults in
Process Control Systems," Third Annual IFIP WG 11.10 International
Conference on Critical Infrastructure Protection, Hanover, New Hampshire,
USA, March 2009. With Hieb, J.L., J.H Graham.

14. 2008, "An Ontological Model for Assessing Security Risk Impact in SCADA
Systems," 23rd International Conference on Computers and Their
Applications (CATA-2008) , 9 to 11 April 2008 , Cancun, Mexico. With
James H. Graham, Thomas A. Harris, Patricia A. S. Ralston,

15. 2006, "An Ontological Model for Accounting Information Systems," (with
Andrew T. Cobb, Alan S. Levitan) *Americas Conference on Information
Systems* AMCIS-12 2006 Acapulco.

16. 2004, "Perceptions of Sales Force Automation Systems as a Means of
Micromanagement," (with Stephen Gohman, Robert Barker, David Faulds)
presented at *ISOneWorld Conference*, Las Vegas, March 2004.

17. 2004, "Perceptions of Sales Force Automation: Differences between Sales and
Management," (with Stephen Gohman, Robert Barker, David Faulds)
presented at *ISOneWorld Conference*, Las Vegas, March 2004.

18. 2003, "Sales Force Automation, Information Accuracy, and User
Satisfaction," (with Gohman, S. F., Barker, R.M., Faulds, D.J.) February,
2003, Las Vegas.

19. 1998, "Standardized Moment Invariants and Their Application in a Neural Network Pattern Recognizer," November, 1998, St. Louis. With Sun, G. C.

20. 1998, "Design of a Novel CIS Curriculum for Educating the Information Systems Developers of 21st Century," (with Wright, A. and Srinivasan, S.) October, 1998, San Antonio, pp. 103-108.

21. 1995, "A Planning Model for a Global Marketing Decision Support System and Its Implementation," (with Horack, R. and Barker, R.M.) September, 1995, Toronto, Canada.

22. 1995, "Development Issues in a Global Marketing Decision Support System," (with Horack, R. and Barker, R.M.) September, 1995, Toronto, Canada.

23. 1994, "Computational Considerations for Fault Diagnosis in Complex Systems," (with Graham, J.H. and Grove, R.) 9th *IEEE International Symposium on Intelligent Control*, August 1994, Columbus, Ohio, USA.

24. 1993, "Rule Learning in Intelligent Diagnostic and Monitoring Systems," (with Graham, J.H.) *International Fuzzy Systems and Intelligent Control Conference*, March, 1993, pp.249-259.

25. 1993, "Intelligent Diagnostics in Robotics and Integrated Manufacturing Systems," (with Graham, J.H.) *IEEE Robotics and Automation Conference*, May, 1993.

26. 1992, "Artificial Neural Network-Based Image Pattern Recognition," (with Zhang, H. and Sun, G.C.) *The 30th Annual ACM Southeast Conference*, Raleigh, NC, April 8-10, 1992, pp.437-441.

27. 1992, "A Hybrid CIM Diagnostic System with Learning Capabilities," (with Graham, J.H., and Alexander, S.M.) *Third International Conference on Computer Integrated Manufacturing*, Rensselaer Polytechnic Institute, Troy, NY, May 20-22, 1992.