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AREAS OF INTEREST

Concepts, Models, Methods, and Algorithms for Data Mining and Knowledge Discovery in Databases; Application of Advanced Computational Intelligence and Soft Computing Methods for Assisting in Decision Making in Manufacturing and Business Systems; Big Data and Streaming Data Analytics

EDUCATION

Degrees:

Doctor of Science (D.Sc.) or *Habilitation Degree (Dr. hab.) in Technical Sciences, Informatics*, conferred by The Systems Research Institute, Polish Academy of Sciences, Warsaw, Poland, January 2014.
Achievement Title*: Application of Advanced Computational Intelligence Methods for Assisting in Decision Making in Business and Production Systems*

Ph.D. in Computer Science Engineering, J.B. Speed School of Engineering, University of Louisville, Louisville, Kentucky, USA, 1995
Dissertation Title: *An Investigation of Artificial Neural Networks for Sensory Integration and Decision Making in Robot Safety Systems*

M.S. in Electrical Engineering awarded by the Gdansk University of Technology, Gdansk, Poland, 1972

EMPLOYMENT RECORD

2005 – present
Professor and Graduate Faculty, Computer Information Systems Department, College of Business, University of Louisville, Louisville, Kentucky.

1998 - 2005
Associate Professor and Graduate Faculty, Computer Information Systems Department, College of Business, University of Louisville, Louisville, Kentucky.

1992 - 98
Assistant Professor, Computer Information Systems Department, College of Business, University of Louisville, Louisville, Kentucky

1990 - 92
Assistant Professor, Information Science and Data Processing Office, J.B. Speed School of Engineering, University of Louisville, Louisville, Kentucky

1987 - 90
Programmer Analyst/Consultant, Administrative Computing Department, later transferred to Research and Instructional Section of Support Services, Computing & Telecommunications, University of Louisville, Louisville, Kentucky

Part-time Instructor, Information Science and Data Processing Office, J.B. Speed School of Engineering, University of Louisville, Louisville, Kentucky

1983 - 86
Computer Software Laboratory Director and Lecturer, Computer Science Department, The Higher Institute of Electronics, Beni Walid, Libya

1979 - 83
Manager of the Software Development Department, Institute of Mathematics Computer Center, University of Gdansk, Gdansk, Poland

The department was involved in computational support of course offerings and administrative functions of the Gdansk University, as well as in several major research grants. (Gdansk University is one of the largest universities in Poland and it offers a significant number of graduate programs.)

1972 - 79
Scientific Programmer Analyst, Institute of Mathematics Computer Center, University of Gdansk, Gdansk, Poland

VISITING APPOINTMENTS

October 2014 – now
Professor, WSB School of Banking, Gdansk, Poland

December 2011 – June 2012
Adjunct Professor, Department of Informatics, The Academy of Business in Dabrowa Gornicza, Dabrowa Gornicza, Poland

2007 (May – June)
Visiting Research Faculty, on sabbatical at School of Computer and Electrical Engineering, University of Alberta, Edmonton, Canada.

2007 (February – April)
Visiting Research Fellow, on sabbatical at School of Computer and Information Science, Edith Cowan University, Perth, Australia.

March 2006 – August 2007
Visiting Professor, Poznan University College of Business and Foreign Languages, Poznan, Poland.

1996 (Summer)
Consultant, U.S. Army, Directorate of Force Development, Fort Knox, Kentucky, USA.

PUBLICATIONS

JOURNAL ARTICLES

1. Karwowski, W., Ostaszewski, K., and Zurada J., 1992, "Applications of the Catastrophe Theory in Modeling the Risk of Low Back Injury in Manual Lifting Tasks", *La Travail Humain*, (The Journal of French Ergonomics Society, in English), 55(3), 259-275.
2. Zurada, J., and Graham, J.H., 1995, "Sensory Integration in a Neural Network-based Real-time Robot Safety System", *International Journal of Human Factors in Manufacturing*, 3(5), 325-340.
3. Grobelny, J., Karwowski, W., and Zurada, J., 1995, Applications of Fuzzy-Based Linguistic Patterns for the Assessment of Computer Screen Design Quality", *International Journal of Human-Computer Interaction*, 7(3), 193-212.
4. Graham, J.H., and Zurada, J., 1996, "A Neural Network Approach to Safety and Collision Avoidance in Robotic Systems", *Journal of Reliability Engineering and System Safety*, 53, 327-338.
5. Zurada, J., Graham, J.H, and Karwowski, W., 1996, "An Application of an Artificial Neural Network for Decision Making in a Robot Safety System", *Journal of Intelligent and Fuzzy Systems*, 4(3), 177-191.
6. Ukita, A., Karwowski, W., Salvendy, G., L. WookGee, and Zurada, J., 1996, "Automatic Tuning of an Electronic Circuit Board using the Artificial Neural Network Approach", *Journal of Intelligent Manufacturing*, 7, 329-339.
7. Zurada, J., Karwowski, W., and Marras, W., 1997, "A Neural Network-Based System for Classification of Industrial Jobs with Respect to the Risk of Low Back Disorders", *Applied Ergonomics*, 28(1), 49-58.
8. Zurada, J., Karwowski, W., and Graham J.H., 1998, "Sensory Integration and Management of Uncertainty in Robot Safety Systems: A Review*", International Journal of Computer Integrated Manufacturing*, 11(3), 262-273.
9. Zurada, J., Foster, B.P., Ward, T., and Barker, R.M., Winter 1998-1999, "Neural Networks versus Logit Regression Models for Predicting Financial Distress Response Variables", *Journal of Applied Business Research*, 15(1), 21-29.

10. Zurada, J., and Srinivasan, S., 1999, "Business Applications Involving Neural Networks", *Transactions in International Information Systems*, No. 1, 85-98.

11. Zurada, J., Wright, A. L., Graham, J., 2001, "A Neuro-Fuzzy Approach for Robot System Safety", *IEEE Transactions on Systems, Man, and Cybernetics, Part C: Applications and Reviews*, 31(1), 49-64.

12. Zurada, J., and Zurada, M., 2002, "How Secure are "Good Loans: Validating Loan-Granting Decisions and Predicting Default Rates on Consumer Loans", *The Review of Business Information Systems*, 6(3), 65-83.

13. Paez, O., Dewees, J., Genaidy, Tuncel, S., A., Karwowski, W., and Zurada, J., 2004, "The Lean Manufacturing Enterprise: An Emerging Socio-Technological System Integration", *Human Factors and Ergonomics in Manufacturing*, 14(3), 285-306.

14. Zurada, J., Karwowski, W., and Marras, W., 2004, "Classification of Jobs with Risk of Low Back Disorders by Applying Data Mining Techniques", *Occupational Ergonomics*, 4(4), 291-305.

15. Zurada, J., and Lonial, S., 2005, "Comparison of the Performance of Several Data Mining Methods for Bad Debt Recovery in the Healthcare Industry", *Journal of Applied Business Research*, 21(2), 37-53.

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

17. Zurada, J., and Barker R.M., 2007, "Using Memory-Based Reasoning for Predicting Default Rates on Consumer Loans", *Review of Business Information Systems*, 11(1), 1-16.

18. Zurada, J., 2007, "Rule Induction Methods for Credit Scoring", *Review of Business Information Systems*, 11(2), 11-21.

19. Kemelgor, B., Sussman, L., Kline, J., and Zurada, J., 2007, "Who Are the Difficult Employees? Psychopathological Attributions of Their Co-Workers", *Journal of Business & Economics Research*, 5(10), 47-62.

20. Zurada, J., and Lam, P. C., 2008, "A Preliminary Investigation of Decision Tree Models for Classification Accuracy Rates and Extracting Interpretable Rules in the Credit Scoring Task: A Case of the German Data Set", *Review of Business Information Systems*, 12(3), 45-53.

21. Pedrycz, W., Rai, P., and Zurada, J., 2008, "Experience-Consistent Modeling for Radial Basis Function Neural Networks", *International Journal of Neural Systems*, 18(4), 279-292.

22. Guan, J., Zurada, J., and Levitan, A., 2008, "An Adaptive Neuro-Fuzzy Inference System Based Approach to Real Estate Property Assessment", *Journal of Real Estate Research*, 30(4), 395-421.

23. Zurada, J., 2010, "Does Feature Reduction Help Improve the Classification Accuracy Rates? A Credit Scoring Case Using a German Data Set", *Review of Business Information Systems*, 14(2), 35-39.

24. Zurada, J., 2010, "Optimization Problems and Genetic Algorithms", *Review of Business Information Systems*, 14(3), 5-9.

25. Foster, B.P., Zurada, J., and Barney, D., 2010, "Could Decision Trees Help Improve Farm Service Agency Lending Decisions?", *Academy of Information and Management Sciences Journal*, 13(1), 69-91.

26. Zurada, J., and Karwowski, W., 2011, "Knowledge Discovery through Experiential Learning from Business and Other Contemporary Data Sources: A Review and Reappraisal", *Information Systems Management*, 28(3), 258-274.

27. Zurada, J., Levitan, A., and Guan, J., 2011, "A Comparison of Regression and Artificial Intelligence Methods in a Mass Appraisal Context", *Journal of Real Estate Research,* 33(3), 349-387.

28. Zurada, J., 2012, "Does Replacing/Removing Missing Values Improve the Models' Classification Performances, *International Journal of Management & Information Systems*, 16(3), 215-220.

29. Zurada, J, 2012, "Classifying the Risk of Work Related Low Back Disorders Due to Manual Material Handling Tasks", *Expert Systems with Applications*, 39(12), 11125-11134.

30. Foster, B.P, and Zurada, J., 2013, "Loan Defaults and Hazard Models for Bankruptcy Prediction", *Managerial Auditing Journal*, 28(6), 516-541.

31. Shi, D., Zurada, J., and Guan, J., 2013, "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.

32. Zurada, J., 2013, "An Investigation of the Effect of Variable Reduction on Classification Accuracy Rates of Consumer Loans", *Review of Business Information Systems*, 17(4). 135-140.

33. Guan, J., Shi, D., Zurada, J., and Levitan, A., 2014, "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), 1-19.

34. Zurada, J., Kunene, N., and Guan, J., 2014, "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.

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

36. Olszak, C.M., and Zurada, J., 2015, "Information Technology Tools for Business Intelligence Development in Organizations", *Polish Journal of Management Studies*, 12(1), 132-142.

37. Shi, D., Zurada, J., Guan, J., and Goyal, S., 2015, "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. (**Keynote paper)**.

38. Shi, D., Guan, J., Zurada, J., Lopez-Vargas, J., and Maria del Carmen Cabrera Loayza, 2017, "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), 1-16, http://www.sersc.org/journals/IJMUE/vol12_no1_2017.php

39. Shi, D., Guan, J., Zurada, J., and Manikas, A. "A Data-Mining Approach to Identification of Risk Factors in Safety Management Systems", accepted in September 2017 to *Journal of Management Information Systems*.

REFEREED JOURNAL ARTICLES SUBMITTED FOR REVIEW OR IN PROGRESS

1. Zurada, J., "Investigation of the Classification Performance and Interpretability of Computational Intelligence Techniques for Loan Granting Decisions", in progress, to be submitted to *Journal of International Technology and Information Management*.

2. Zurada, J., Shi, D., Karwowski, W., Guan, J., and Cekit, E., "Detecting Adverse Events in an Active Theater of War Using Advanced Computational Intelligence Techniques", in progress, to be submitted to *Expert Systems with Applications*.

3. Foster, B.P., and Zurada, J., "Comparisons of Various Artificial Intelligence Tools for Bankruptcy Prediction", in progress.

BOOKS

1. Abramowicz, W., and Zurada, J., (Eds.), 2001, *Knowledge Discovery for Business Information Systems*, Kluwer Academic Publishers, Boston, 431 pages.
2. Kantardzic, M., and Zurada, J. (Eds.), 2005, *Next Generation of Data Mining Applications*, Wiley/IEEE Press, 671 pages.

BOOK CHAPTERS

1. Karwowski, W., and Zurada, J., 1997, "Software and Computers: Hybrid Automated Systems", *International Labor Office Encyclopedia of Occupational Health and Safety*, (International Labor Office, Geneva, Switzerland), pp. 58.36-58.41.
2. Zurada, J., Foster, B.P., and Ward, T.J., 2001, "Investigation of Artificial Neural Networks for Classifying Levels of Financial Distress of Firms: The Case of an Unbalanced Training Sample", in *Knowledge Discovery for Business Information Systems*, W. Abramowicz and J. Zurada (Eds.), Kluwer Academic Publishers, Boston, pp. 397-424.
3. Zurada, J., 2002, "Data Mining Techniques in Predicting Default Rates on Customer Loans", in *Databases and Information Systems II*, H-M. Haav, A. Kalja (Eds), Kluwer Academic Publishers, pp. 285-296. (This is a slightly revised version, with mainly editorial changes, of the article from point 18 on page 6.)
4. Kantardzic, M., and Zurada, J., 2005, "*Trends in Data Mining Applications: From Research Labs to Fortune 500 Companies*" in *Next Generation of Data Mining Applications*, M. Kantardzic, and J. Zurada, (Eds), IEEE Press/Wiley, pp. 1-13.

ARTICLES IN EDITED BOOKS & EDITED CONFERENCE PROCEEDINGS

1. Karwowski, W., Hancock, P., Zurada, J., and Ostaszewski, K., 1991, "Risk of Low Back Overexertion Injury Due to Manual Load Lifting in View of the Catastrophe Theory", Designing for Everyone, Y. Queinnec and F. Daniellou (Eds.), Taylor and Francis, London, pp. 66-68.
2. Grobelny, J., Cysewski, P., Karwowski, W., and Zurada. J., 1992, "APOLIN: A 3-Dimensional Ergonomic Design and Analysis System", *Computer Applications in Ergonomics, Occupational Safety and Health*, M. Mattila, W. Karwowski, (Eds.), North-Holland, pp. 129-135.

3. Karwowski, W., Zurada, J., Marras, W., and Gaddie, P., 1994, "A Prototype of the Artificial Neural Network-Based System for Classification of Industrial Jobs with Respect To Risk of Low Back Disorders", *Advances in Industrial Ergonomics and Safety VI*, F. Aghazadeh (Ed.), Taylor & Francis, London, pp. 19-22.

4. Graham, J.H., Karwowski, W., Parsaei, H., and Zurada, J., 1994, "Concurrent Engineering for Enhancing Worker Safety in Robotic Workcells", *Advances in Agile Manufacturing*, P. Kidd and W. Karwowski (Eds.), IOS Press, Amsterdam, pp. 79-82.

5. Zurada, J., and Graham, J.H., 1995, "A Neural Network Detection Unit for a Robot Safety System", *Intelligent Engineering Systems through Artificial Neural Networks*, C.H. Dagli, M. Akay, C.L.D. Chen, B.R. Fernandez, and J. Ghosh (Eds.), ASME Press, 5, pp. 879-884.

6. Zurada, J., Karwowski, W., and Wright, A., 1996, "A Fuzzy Logic-based Detection Unit for a Robot Safety System", *Manufacturing Agility and Hybrid Automation - I*, R.J. Koubek and W. Karwowski (Eds.), The IEA Press, pp. 580-583.

7. Zurada, J., and Wright, A., 1996, "A Comparison of the Neural Network- and Fuzzy Logic-Based Decision Unit for a Robot Safety System", *Intelligent Engineering Systems Through Artificial Neural Networks*, C.H. Dagli, M. Akay, C.L.D. Chen, B.R. Fernandez, and J. Ghosh (Eds.), ASME Press, 6, pp. 209-214.

8. Zurada, J., and Ifeacho, P., 1996, "Artificial Intelligence: Neural Networks and Expert Systems in Business Decision Making and Forecasting", *Proceedings of the Fifth International Conference on Information Systems Development, Methods & Tools, Theory & Practice*, S. Wrycza, and J. Zupancic (Eds.), pp. 633-636, September, Gdansk, Poland.

9. Zurada, J., Foster, B.P., Ward, T.J., and Barker, R.M., 1997, "A Comparison of the Ability of Neural Networks and Logit Regression Models to Predict Levels of Financial Distress", *Methods and Tools, Theory and Practice*, W. Wojtkowski, G. Wojtkowski, J. Zupancic, S. Wrycza (Eds.), Plenum Press, New York, pp. 291-295.

10. Gorska, E., and Zurada, J., 1997, "A Flexible Computer Systems for Ergonomic Diagnosis*", In Design of Computing Systems: Cognitive Considerations*, G. Salvendy, M.J. Smith and R.J. Koubek (Eds.), Elsevier Publishers, pp. 679-682.

11. Zurada, J., and S. Srinivasan, 1998, "Expert Systems and Neural Networks: Business Applications", *Business Information Systems '98*, W. Abramowicz (Ed.), Akademia Ekonomiczna, Poznan, Poland, pp. 327-339.

12. Zurada, J., 1999, "Developing a Neural Network Application", *Evolution and Challenges in System Development*, J. Zupanczic, W. Wojtkowski, G. Wojtkowski, and S. Wrycza (Eds.), Kluwer Academic/Plenum Publishers, New York, pp. 595-605.

13. Salam, A., and Zurada, J., 1999, "Consumers As Investors: Investor Psychology and the Case of the Internet Industry", *Proceedings of the Americas Conference on Information Systems*, W. D. Haseman and D.L. Nazareth (Eds.), Association for Information Systems, Milwaukee, Wisconsin, August, pp. 535-537. (**The track best paper award**).

14. Zurada, J. and Salam, A., 1999, "Data Mining Using Neural Networks and Statistical Techniques: A Comparison", *Systems Development Methods for Databases, Enterprise Modeling, and Workflow Management,* W. Wojtkowski, W.G. Wojtkowski, S. Wrycza, and J. Zupanczic (Eds.), Kluwer Academic/Plenum Publishers, New York, pp. 299-312.

15. Zurada, J., and Salam, A., 2000, "Fuzzy Logic Model of Consumers as Internet Industry Investors", in *Electronic Commerce: The End of the Beginning - the Proceedings of the 13th Bled Electronic Commerce Conference*, S. Klein, B. O'Keefe, J. Gricar, and M. Podlogar (Eds.), Bled, Slovenia, June, pp. 544-555.

16. Zurada, J., Foster, B.P., and Ward, T.J., 2001, "Artificial Neural Networks in Predicting a Dichotomous Level of Financial Distress for Uneven Training and Testing Samples", In *Contemporary Trends in Systems Development*, (M.K. Sein, B.E. Munkvold, T. U. Ørvik, , W. Wojtkowski, G. Wojtkowski, J. Zupancic, and S. Wrycza (Eds.), Kluwer Academic/Plenum Publishers, New York, pp. 175-182.

17. Zurada, J., 2002, "Comparison of the Performance of Several Data Mining Techniques for Loan-Granting Decisions", In *New Perspectives on Information Systems Development: Theory, Methods, and Practice*, G. Harindranath, W.G. Wojtkowski, J. Zupancic, Duska Rosenberg, W. Wojtkowski, S. Wrycza, and J.A. Sillince (Eds.), Kluwer Academic/Plenum Publishers, New York, pp. 439-448.

18. Zurada, J. , 2002, "Data Mining Techniques in Predicting Default Rates on Customer Loans", *Proceedings of the 5th International Baltic Conference, Baltic DB&IS'2002, Databases and Information Systems*, Hele-Mai Haav and Ahto Kalja (Eds.), Tallinn, Estonia, June 3-6, 2002, pp. 177-188.

19. Zurada, J., 2002, "Management of Uncertainty Using Neural Networks", *Proceedings of the 9th International Conference on Neural Information Processing (ICONIP'02)*, Lipo Wang, Jagath C. Rajapakse, Kunihiko Fukushima, Soo-Young Lee, and Xin Yao (Eds.), IEEE Press, Singapore, November 18-22, 2002, pp. 2088-2092.

20. Fiet, J., Gupta, M., and Zurada, J., 2003, "Evaluating the Wealth Creating Potential of Venture Ideas", *2003 Frontiers of Entrepreneurship Research: Proceedings of the 23rd Annual Entrepreneurship Research Conference*, W.D. Bygrave, C.G. Brush, P. Davidsson, J. Fiet, P. Greene, R.T. Harrison, M. Lerner, G.D. Meyer, J. Sohl, A. Zacharakis (Eds.), p. 446.

21. Zurada, J., and Lonial, S., 2004, "Application of Data Mining Methods for Bad Debt Recovery in the Healthcare Industry", *The Proceedings of the 6th International Baltic Conference on Databases and Information Systems*, *Baltic DB&IS'2004,* J. Barzdins (Ed.), Vol. 672, pp. 207-217.

22. Zurada, J., 2010, "Could Decision Trees Improve the Classification Accuracy and Interpretability of Loan Granting Decisions?", *Proceedings of the 43rd Hawaii International Conference on System Sciences* (HICSS'43), (R. Sprague, Ed.), IEEE Computer Society Press, Kauai, January 5-8, 2010.

23. Zurada, J., and Kunene, N., 2010, "Performance Assessment of Data Mining Methods for Loan Granting Decisions: A Preliminary Study", *Artificial Intelligence and Soft Computing - The Proceedings of the 10th International Conference on Artificial Intelligence and Soft Computing* (ICAISC 2010), (L. Rutkowski, R. Scherer, R. Tadeusiewicz, L.A., Zadeh,, J.M. Zurada, Eds), Part I, pp. 495-502, Lecture Notes in Artificial Intelligence. Springer, Berlin.

24. Zurada, J., and Kunene, N., 2011, "Comparisons of the Performance of Computational Intelligence Methods for Loan Granting Decisions", *Proceedings of the 44th Hawaii International Conference on System Sciences* (HICSS'44), (R. Sprague, Ed.), IEEE Computer Society Press, Kauai, January 4-7, 2011.

25. Zurada, J., 2012, "Predicting the Risk of Low Back Disorders Due to Manual Handling Tasks", *Proceedings of the 45th Hawaii International Conference on System Sciences* (HICSS'45), (R. Sprague, Ed.), IEEE Computer Society Press, Maui, Hawaii, USA, January 4-7, 2012, pp. 1080-1088.

26. Zurada, J., Shi, D., and Guan, J., 2013, "A Fuzzy Neural Approach to Classifying Low Back Disorders Risks", *Proceedings of the 46th Hawaii International Conference on System Sciences (HICSS'46)*, (R. Sprague, Ed.), IEEE Computer Society Press, pp. 2382-2388.

27. Shi, D., Zurada, J., and Guan, J., 2013, "Human Factors Identification in Aviation Incidents Using Topic Mining", *Proceedings of the Seventh China Summer Workshop on Information Management (CSWIM 2013)*, (M. Li, H.J. Wang, D.D. Zeng, Eds.), pp. 143-149, Tianjin, China, June 29-30, 2013.

28. Shi, D., Zurada, J., and Guan, J., 2014, "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.

29. Shi, D., Guan, J., and Zurada, J., 2014, "Improving Performance of Classification Models with Textual Data", *Proceedings of the International Workshop of Information Technology and Internet Finance*, Chengdu, China, June 25, 2014.

30. Shi, D., Zurada, J., and Guan, J., 2015, "A Neuro-fuzzy System with Semi-supervised Learning for Bad Debt Recovery in the Healthcare Industry", *Proceedings of the 48th Hawaii International Conference on System Sciences (HICSS'48)*, (T.X. Bui, R. Sprague, Eds.), IEEE Computer Society Press, pp. 3115-3124.

31. Shi, D., Zurada, J., and Guan, J., 2016, "A Bayesian Network Approach to Classifying Bad Debt in Hospitals", *Proceedings of the 49th Hawaii International Conference on System Sciences (HICSS'49)*, (T.X. Bui, R. Sprague, Eds.), IEEE Computer Society Press, pp. 3298-3306.

32. Kantardzic, M., and Zurada, J., 2016, "Introduction to Streaming Data Analytics and Applications Minitrack", *Proceedings of the 49th Hawaii International Conference on System Sciences (HICSS'49)*, (T.X. Bui, R. Sprague, Eds.), IEEE Computer Society Press, p. 1729.

33. Shi, D., Zurada, J., and Guan, J., 2017, "Identification of Human Factors in Aviation Incidents Using a Data Stream Approach", *Proceedings of the 50th Hawaii International Conference on System Sciences (HICSS'50)*, (T.X. Bui, R. Sprague, Eds.), URI: http://hdl.handle.net/10125/41280, ISBN: 978-0-9981331-0-2, pp. 1073-1082. **The mini-track best paper award.**

34. Kantardzic, M., and Zurada, J., 2017, "Introduction to Streaming Data Analytics and Applications Minitrack", *Proceedings of the 50th Hawaii International Conference on System Sciences (HICSS'50)*, (T.X. Bui, R. Sprague, Eds.), URI: http://hdl.handle.net/10125/41357, ISBN: 978-0-9981331-0-2, p. 1692.

ARTICLES IN CONFERENCE PROCEEDINGS

1. Ulman, Z., Czyzak, M., and Zurada, J.M., 1991, "Fast Division in Residue Arithmetic", *Proceedings of IEEE Pacific Rim Conference on Communications, Computers and Signal Processing*, (2), pp. 696-699, May, Victoria, B.C., Canada.

2. Ulman, Z., Czyzak M., and Zurada, J.M., 1993, "Effective RNS Scaling Algorithm with the Chinese Remainder Theorem Decomposition", *Proceedings of IEEE Pacific Rim Conference on Communications, Computers and Signal Processing*, (2), pp. 528-531, Victoria, B.C., Canada.

3. Zurada, J., 1994, "End Effector Target Position Learning Using Feedforward with Error Back-Propagation and Recurrent Neural Networks", *Proceedings of the IEEE International Conference on Neural Networks*, Orlando, Florida, pp. 2633-2638.

4. Karwowski, W., , J., and Marras, W., 1994, "A Framework for Neural Network-Based System for Classification of Risk Zurada of Injury Due to Manual Handling Jobs*", Proceedings of the 12-th Congress of the International Ergonomics Association*, Toronto, Canada, pp.

5. Zurada, J., Rogers, G., and Graham, J.H., 1995, "Sensory Integration in a Robot Safety System", *Proceedings of the 2nd Annual Student Workshop in Manufacturing Research*, Sponsored by University of Cincinnati and Institute of Advanced Manufacturing Sciences, pp. 7-15.

6. Zurada, J., and Graham, J.H., 1995, "A Neural Network-based Robot Safety System*", Proceedings of the IEEE International Conference on Man, Systems, and Cybernetics*, Vancouver, Canada, October, pp. 2922-2927.

7. Graham, J.H., Zurada, J., and Rogers, G., 1995, "Development of a Sensory-based Robot Safety System", *Proceedings of the Al-Azhar Engineering Fourth International Conference*, Cairo, Egypt, December, Volume 11, pp. 410-418.

8. Graham, J.H., Zurada, J., and Parseai H.P., 1999, "Systems Analysis of Sensory-Based Robot Safety System", *Proceedings of the 3rd International Conference on Engineering Design and Automation (EDA '99)*, August, Vancouver, Canada, pp. 596-600.

9. Zurada, J., 2002, "From Data Warehousing to Knowledge Discovery", *Proceedings of the Conference INFOBAZY 2002 – Databases for Science (Bazy Danych dla Nauki)*, pp. 19-25.

10. Subhash, L., and Zurada, J., 2004, "Comparing the Performance of Various Data Mining Methods in the Recovery of Bad Debts for the Healthcare Industry", *Proceedings of the 11th International Conference On Recent Advances in Retailing and Consumer Services Science*, Prague, Czech Republic, July 10-13, 2004, p. 119.

11. Gohmann, S. F., Guan, J., Zurada, J., "A Comparison of Parametric and Non-parametric Methods to Estimate the Costs of Obesity", *7th World Congress on Health Economics*, Beijing, China, July 12-15, 2009.

12. Foster, B. P., Zurada, J., Barney, D. K., "Could Decision Trees Help Improve Farm Service Agency Lending Decisions?", *Proceedings of Allied Academies International Conference*, New Orleans, USA, April 14-16, 2010.

13. Zurada, J., "Are Decision Trees the Best Tool for Improvement of the Classification Accuracy Rates and Interpretability of Loan Granting Decisions?", *The AIDIS International Conference on Information Systems*, Avila, Spain, March 11-13, 2011.

14. Shi, D., Guan, J., Zurada, J., "Cost-Sensitive Learning for Imbalanced Bad Debt Datasets in Healthcare Industry", *Proceedings of the 2015 Asia-Pacific Conference on Computer Aided System Engineering (APCASE' 2015)*, pp. 30-35, Quito, Ecuador, July 14-16, 2015.

15. Shi, D., Guan, J., Levitan, A.S., and Zurada, J. "Improving Prediction Models for Mass Assessment: A Data Stream Approach", *Proceedings of the 11th China Summer Workshop on Information Management (CSWIM 2017)*, pp. 463-468, Nanjing, China, June 23-25, 2017.

PAPERS PRESENTED/TALKS DELIVERED

1. *The 11th Congress of the International Ergonomics Association*, "Risk of Low Back Overexertion Injury Due to Manual Load Lifting in View of the Catastrophe Theory", Paris, France, July 1991.

2. *The International Conference on Computer-Aided Ergonomics and Safety*, "APOLIN: A 3-dimensional Ergonomic Design and Analysis System", Tampere, Finland, May 1992.

3. *The UC/IAMS (University of Cincinnati/Institute of Advanced Manufacturing Sciences, Inc.) for Manufacturing Research*, "Sensors Integration in Neural Network-Based Robot Safety System", Cincinnati, Ohio, April 1994.

4. *The World Congress on Computational Intelligence, IEEE International Conference on Neural Networks*, "End Effector Target Position Learning Using Feed-forward with Error Back-Propagation and Recurrent Neural Networks", Orlando, Florida, June 1994.

5. *The International Industrial Ergonomics and Safety Conference*, "A Prototype of the Artificial Neural Network-Based System for Classification of Industrial Jobs with Respect To Risk of Low Back Disorders", San Antonio, Texas, July 1994.

6. *The 4th International Conference on Human Aspects of Advanced Manufacturing & Hybrid Automation*, "Concurrent Engineering for Enhancing Worker Safety in Robotic Workcells", Manchester, England, June 1994.

7. *The 12-th Congress of the International Ergonomics Association*, "A Framework for Neural Network-Based System for Classification of Risk of Injury Due to Manual Handling Jobs", Toronto, Canada, August 1994.

8. *The Computer Science and Engineering Ph.D. Seminar*, "Neural Network-Based Robot Safety System", Louisville, Kentucky, October 1994.

9. *The 2nd Annual Student Workshop in Manufacturing Research*, "Sensory Integration in a Robot Safety System", University of Cincinnati and Institute of Advanced Manufacturing Sciences, Cincinnati, Ohio, April 1995.

10. *The IEEE International Conference on Man, System, and Cybernetics*, "A Neural Network-based Robot Safety System", Vancouver, Canada, October 1995.

11. *The Artificial Neural Networks for Intelligent Engineering (ANNIE) Conference*, "A Neural Network Detection Unit for a Robot Safety System", St. Louis, Missouri, November 1995.

12. *The Al-Azhar Engineering Fourth International Conference*, "Development of a Sensory-based Robot Safety System", Cairo, Egypt, December 1995.

13. *The Fifth International Conference on Human Aspects of Advanced Manufacturing*: Agility and Hybrid Automation, "A Fuzzy Logic-based Detection Unit for a Robot Safety System", Maui, Hawaii, August 1996.

14. *The Fifth International Conference on Information Systems Development*, "Artificial Intelligence: Neural Networks and Expert Systems in Business Decision Making and Forecasting", Gdansk, Poland, September 1996.

15. *The Conference for Intelligent Engineering Systems Through Artificial Neural Networks*, "A Comparison of the Neural Network- and Fuzzy Logic-Based Decision Unit for a Robot Safety System, St. Louis, Missouri, November 1996.

16. *The Sixth International Conference on Information Systems Development*, "A Comparison of the Ability of Neural Networks and Logit Regression Models to Predict Levels of Financial Distress", Boise, Idaho, August 1997.

17. *Wismar Hochschule*, "Application of Neural Networks and Expert Systems in Business Decision Making and Forecasting, Wismar, Germany, July 1997. (**Invited**).

18. *The Seventh International Conference on Human-Computer Interaction*, "Computer-based System for Workstation Evaluation and Design", San Francisco, California, August 1997.

19. *The 2nd International Conference on Business Information Systems*, "Expert Systems and Neural Networks: Business Applications", Poznan, Poland, April 1998.

20. *The Institute of Oceanology of the Polish Academy of Science*, "On Neural Networks and Fuzzy Logic", Sopot, Poland, July 1998. (**Invited**).

21. *The 7th International Conference on Information Systems Development*, "Developing a Neural Network Application", Bled, Slovenia, September 1998.

22. The *Americas Conference on Information Systems*, "Consumers as Investors: Investor Psychology and the Case of the Internet Industry", Milwaukee, Wisconsin, USA, August 1999. (**The track best paper award**.)

23. *The Third International Conference on Advanced Manufacturing*, "Systems Analysis of Sensory-Based Robot Safety System", Vancouver, Canada, August 1999.

24. *The 9th International Conference on Information Systems Development*, "Artificial Neural Networks in Predicting a Dichotomous Level of Financial Distress for Uneven Training Samples", Kristiansand, Norway, August 2000.

25. *The 5th International Baltic Conference, Baltic DB&IS'2002*, "Data Mining Techniques in Predicting Default Rates on Customer Loans", Tallinn, Estonia, June 2002.

26. *The Conference INFOBAZY 2002 – Databases for Science* (Bazy Danych dla Nauki), "From Data Warehousing to Knowledge Discovery", Gdansk-Sobieszewo, Poland, June 2002 (**Plenary speech**).

27. *The 9th International Conference on Neural Information Processing (ICONIP'02)*, "Management of Uncertainty Using Neural Networks", Singapore, November 18-22, 2002.

28. The 2003 *Babson-College Entrepreneurship Research Conference*, "Evaluating the Wealth Potential Venture of Ideas", Boston, Massachusetts, USA, June 2003.

29. *The 2003 Academy of Management Meeting*, "The Difficult Employee: A Profile and Perspective", Seattle, Washington, USA, August 2003.

30. *The Gdansk Managers Training Foundation*, "From Data Warehouses to Knowledge Discovery and Business Applications", Gdansk, Poland, May 2004. (**Invited**).

31. *The 11th International Conference On Recent Advances in Retailing and Consumer Services Science*, "Comparing the Performance of Various Data Mining Methods in the Recovery of Bad Debts for the Healthcare Industry", Prague, Czech Republic, July, 2004.

32. *The 2005 International Applied Business Research Conference*, "Neuro-Fuzzy Approach to Bad Debt Recovery in the Healthcare Industry", Puerto Vallarta, Mexico, March 2005.

33. *The Technical University of Gdansk,* School of Management and Economics, "From Data Warehouses to Knowledge Discovery", Gdansk, Poland, May 2005. (**Invited**).

34. *The University of Louisville – InfoSec Seminar Series*, "Data Mining for Analysis of Rare Events: A Case of Computer Security and Other Applications", Louisville, Kentucky, USA, September 2005. (**Invited**).

35. *The University of Kentucky*, Von Allmen School of Accountancy, "Can Decision Trees and Other Data Mining Techniques Assist in Auditors' Going-Concern Evaluations?", Lexington, Kentucky, USA, February, 2006. (**Invited**).

36. *The 2006 International Business Research Conference*, "Predicting Default Rates on Consumer Loans Using Computational Intelligence Techniques", Cancun, Mexico, March 2006.

37. *The Poznan University College of Business and Foreign Languages*, "From Data Warehouses to Knowledge Discovery", Poznan, Poland, May 2006. (**Invited**).

38. *The American Accounting Association Annual Meeting*, "Can Decision Trees and Other Data mining Methods Assist in Auditors' Going-Concern Evaluations?", Washington D.C, USA, August 2006.

39. *The Western Australia Chapter of IEEE Computational Intelligence Society and Edith Cowan University*, "Data Mining Methods for Business, Ergonomics, Health, and Science Applications", Perth, Australia, March 2007. (**Invited**).

40. *The 2007 Meeting of Southeast Region of the American Accounting Association*, "Use of a Decision Tree as a Potential Tool for Farm Service Administration Lending Decisions: A Research Note", Atlanta, Georgia, USA, May 2007.

41. *School of Computer and Electrical Engineering, University of Alberta*, "Neuro-Fuzzy Approaches to Manufacturing and Business Applications", Edmonton, Canada, June 2007. (**Invited**).

42. American Real Estate Society 25th Annual Meeting, "Assessment of Real Estate Property Value: A Comparative Study", Monterey, California, USA, April 1-4, 2009.

43. *The 7th World Congress on Health Economics*, "A Comparison of Parametric and Non-parametric Methods to Estimate the Costs of Obesity", Beijing, China, July 12-15, 2009.

44. *The 43rd Hawaii International Conference on System Sciences (HICSS'43)*, "Could Decision Trees Improve the Classification Accuracy and Interpretability of Loan Granting Decisions?", Kauai, Hawaii, USA, January 5-8, 2010.

45. *The 10th International Conference on Artificial Intelligence and Soft Computing (ICAISC 2010)*, "Performance Assessment of Data Mining Methods for Loan Granting Decisions: A Preliminary Study", Zakopane, Poland, June 14-17, 2010.

46. *The 44th Hawaii International Conference on System Sciences (HICSS'44)*, "Comparisons of the Performance of Computational Intelligence Methods for Loan Granting Decisions", Kauai, Hawaii, USA, January 4-7, 2011.

47. *The AIDIS International Conference on Information Systems*, "Are Decision Trees the Best Tool for Improvement of the Classification Accuracy Rates and Interpretability of Loan Granting Decisions?", Avila, Spain, March 11-13, 2011.

48. *The 45th Hawaii International Conference on System Sciences (HICSS'45)*, "Predicting the Risk of Low Back Disorders Due to Manual Handling Tasks", Maui, Hawaii, USA, January 4-7, 2012.

49. *The 46th Hawaii International Conference on System Sciences (HICSS'46)*, "A Fuzzy Neural Approach to Classifying Low Back Disorders Risks", Maui, Hawaii, USA, January 7-10, 2013.

50. *The 7th China Summer Workshop on Information Management (CSWIM 2013)*, "Human Factors Identification in Aviation Incidents Using Topic Mining", Tianjin, China, June 29-30, 2013.

51. *The 47th Hawaii International Conference on System Sciences (HICSS'47)*, "A Neuro-fuzzy Approach to Bad Debt Recovery in Healthcare", Big Island, Hawaii, USA, January 6-9, 2014.

52. *The International Workshop of Information Technology and Internet Finance*, "Improving Performance of Classification Models with Textual Data", Chengdu, China, June 25, 2014.

53. *The 48th Hawaii International Conference on System Sciences (HICSS'48)*, "A Neuro-fuzzy System with Semi-supervised Learning for Bad Debt Recovery in the Healthcare Industry", Kauai, Hawaii, USA, January 5-8, 2015.

54. *The 2015 Asia-Pacific Conference on Computer Aided System Engineering (APCASE' 2015)*, "Cost-Sensitive Learning for Imbalanced Bad Debt Datasets in Healthcare Industry", Quito, Ecuador, July 14-16, 2015.

55. *The 49ᵗʰ Hawaii International Conference on System Sciences (HICSS'49)*, "A Bayesian Network Approach to Classifying Bad Debt in Hospitals", Kauai, Hawaii, USA, January 5-8, 2016.

56. *The 50ᵗʰ Hawaii International Conference on System Sciences (HICSS'50)*, "Identification of Human Factors in Aviation Incidents Using a Data Stream Approach", Big Island, Hawaii, USA, January 4-7, 2017.

57. *The 11ᵗʰ China Summer Workshop on Information Management (CSWIM 2017)*, "Improving Prediction Models for Mass Assessment: A Data Stream Approach", Nanjing, China, June 24-25, 2017 (poster).

Ph.D. DISSERTATION COMMITTEES AND THESIS EXAMINER

1. Ph.D. Dissertation Committee, Member, *A Model for Mining Distributed Frequent Sequences*, Maha Mohamed Soliman, Computer Science Engineering, J.B. Speed Engineering School, University of Louisville, Louisville, KY, USA, (2004-2005).

2. Ph.D. Dissertation Committee, Member, *CCFDP: Collaborative Click Fraud Detection and Prevention System*, Li Ge, Computer Science Engineering, J.B. Speed Engineering School, University of Louisville, Louisville, KY, USA, (2005-2007).

3. Ph.D. Dissertation Committee, Member, *Examination, Properties, and Algorithms for Maximal Outerplanar Graphs*, Benjamin Allgeier, Department of Mathematics, College of Arts and Sciences, University of Louisville, Louisville, KY, USA, (2007-2008).

4. Ph.D. Thesis, Examiner, *Spatial Indexing for Creating Company Profiles*, Agata Filipowska, Macquarie University, Melbourne, Australia, 2010.

5. Ph.D. Dissertation Committee, Member, *A Reduced Labeled Samples (RLS) Framework for Classification of Imbalanced Concept-Drifting Streaming Data*, Elaheh Arabmakki, Computer Science Engineering, J.B. Speed Engineering School, University of Louisville, Louisville, KY, USA, (2014-2016).

GRANT PROPOSALS FUNDED

1. $13,500, Principal Investigator, U.S. Army, Directorate of Force Development, Fort Knox, Kentucky. Project title: "Assistance in Management of the Army Research Laboratory Effort Concerning a Constructive Simulation Modeling of Task and Workload Analysis of Battalion and Brigade Command Posts", Summer 1996.
2. $4,000, Principal Investigator, The Intramural Research Incentive Grant, Vice President for Research, University of Louisville, Louisville, Kentucky. Project title: "Knowledge Discovery Using Neural Networks and Fuzzy Logic - Predicting Financial Performance of Firms", December 1998.
3. $2,800, Principal co-investigator, The College of Business Continuous Improvement Grant, University of Louisville, "Web-based Assisted Learning of the Database Design Course", June 2001.
4. $16,000, Principal investigator, Summer Research Grant, College of Business, University of Louisville, Louisville, KY, Project title: "The Effect of Human Factors Issues in Aviation Safety Incident Reports", Summer 2008.
5. $16,000, Principal investigator, Summer Research Grant, College of Business, University of Louisville, Louisville, KY, Project title: "Neuro-fuzzy Systems for Real Estate Property Valuation", Summer 2010.
6. $7,000, Principal investigator, Summer Research Grant, College of Business, University of Louisville, Louisville, KY, Project title: "Investigation of the Influence of Human Factors Issues in Voluntarily Submitted Aviation Safety Incident Reports", Summer 2012.
7. $8,000, Principal investigator, Summer Research Grant, College of Business, University of Louisville, Louisville, KY, Project title: "A Neuro-Fuzzy Approach to Classifying Work Related Low Back Disorders Risks Due to Manual Material Handling Tasks", Summer 2013.
8. $16,000, Principal investigator, Summer Research Grant, College of Business, University of Louisville, Louisville, KY, Project title: "An Innovative Approach to Market Segmentation for Improved Price Prediction", Summer 2014.
9. $16,000, Principal investigator, Summer Research Grant, College of Business, University of Louisville, Louisville, KY, Project title: " An Investigation of the Performance of Computational Intelligence and Soft Computing Methods for Bad Debt Recovery in the Healthcare Industry", Summer 2015.
10. $8,000, Principal investigator, Summer Research Grant, College of Business, University of Louisville, Louisville, KY, Project title: "A Bayesian Network Approach to Classifying Bad Debt in Hospitals", Summer 2016.

11. $8,000, Principal investigator, Summer Research Grant, College of Business, University of Louisville, Louisville, KY, Project title: "Predicting Adverse Events Based on Infrastructure Spending in an Active Theater of War Using Advanced Data Mining Techniques", Summer 2017.

TEACHING

Semester Courses Taught:

1. Data Mining and Knowledge Discovery in Databases (DM/KDD)
2. Artificial Intelligence and Exploration of Business Data
3. Infrastructure Technologies
4. Database Design
5. Computer Architecture and Operating Systems
6. Business Data Communications
7. Introduction to Cryptography
8. Programming Languages: C++, C, SAS (Statistical Analysis System), COBOL, FORTRAN, and BASIC
9. Microcomputer Applications
10. Computer Information Systems
11. Applied Statistics for the Information Sciences
12. Data and File Structures
13. Advanced Programming and Computational Methods
14. Numerical Analysis
15. Introduction to Computers
16. Algorithms and Programming in Research
17. Supervised Students' Independent Studies

Short Courses Taught (1-2 days):

1. Beginning & Advanced SAS
2. SAS Graphics
3. Database Management for Researchers

INSTRUCTIONAL MATERIALS

1. Zurada, J., 1993, "FORTRAN Programs in VM/CMS Environment", *University of Louisville Printing and Publication Services*, Louisville, KY, Course Pack, 51 pages.

2. Srinivasan, S., and Zurada, J., 1996, "Modern Cobol – A True Business Perspective", *GrayBookstore*, Louisville, KY, Course Pack, 430 pages.

PROFESSIONAL ACTIVITIES & MEMBERSHIPS

SERVED ON CONFERENCE PROGRAM COMMITTEES/REVIEWED PAPERS

1. The Annual Conferences on Information Systems Development (ISD'1997 through ISD'2014). These 18 conferences were held in Gdansk, Poland; Boise, ID, USA; Bled, Slovenia; London, England; Riga, Latvia; Vilnius, Lithuania; Kristiansand, Norway; Melbourne, Australia; Budapest, Hungary; Galway, Ireland; Nanchang, China; Berlin, Germany; Prague, Czech Republic.
2. The annual/biennial Conferences on Business Information Systems (BIS'1998 through BIS'2016). These 18 conferences were held in Colorado Springs, CO, USA; Poznan, Poland; Innsbruck, Austria; Vilnius, Lithuania, and Cyprus to name a few.
3. Federated Conference on Computer Science and Information Systems (FedCSIS'2013-FedCSIS'2016). These 4 conferences were held in Cracow, Warsaw, Lodz, and Gdansk; Poland.
4. The 15th Americas Conference on Information Systems (AMCIS'2009), San Francisco, CA, USA, August 2009.
5. The International Conference on Information Systems (ICIS'2009), Phoenix, Arizona, USA, December 2009.
6. The 13th International Conference on Information Processing and Management of Uncertainty in Knowledge-Based Systems, Dortmund, Germany, June-July, 2010.
7. The 5th, 6th, 8th, and 9th International Conferences on Databases and Information Systems (BALT'2002, BALT'2004, BALT'2008, and BALT'2010). These 4 conferences were held in Tallinn, Estonia; Riga, Latvia; and Vilnius, Lithuania.

8. The International Conferences on Machine Learning and Applications (ICMLA'2004, Louisville, KY, USA; ICMLA'2005, Los Angeles, CA, USA).
9. International Workshops on Flexible Database and Information Systems Technology (FlexDBIST'2006, Cracow, Poland; FlexDBIST'2009, Linz, Austria).
10. International Multiconference on Computer Science and Information Technology, October 2010, Wisła, Poland.
11. The 40th, 44th, and 45th Hawaii International Conferences on Systems Science (HICCS'2007, HICSS'2011, HICSS'2012). These conferences were held in Hawaii, USA.
12. ICT Management for Global Competitiveness and Economic Growth in Emerging Economies 2012 Conference, September , 2012, Wroclaw, Poland.

CHAIRED CONFERENCE SESSIONS/MINITRACKS

1. The Human Aspects of Advanced Manufacturing and Hybrid Automation Conference (HAAMAHA'1996), Maui, Hawaii, August 1996.
2. The Information Systems Development Conference (ISD'1997), Boise, Idaho, August 1997.
3. The Information Systems Development Conference (ISD'1998), Bled, Slovenia, September 1998.
4. The Information Systems Development Conference (ISD'2000), Kristiansand, Norway, August 2000.
5. The 5th Baltic International Conference on Databases and Information Systems (BALT'2002), Tallinn, Estonia, June 2002.
6. The 9th International Conference on Neural Information Processing (ICONIP'2002), Singapore, November 2002.
7. The AIDIS International Conference on Information Systems, *Information Management Minitrack*, Avila, Spain, March 2011.
8. The 49th Hawaii International Conference on System Sciences, *Streaming Data Analytics and Applications Minitrack*, Kauai, Hawaii, USA, January 2016.
9. The 50th Hawaii International Conference on System Sciences, *Streaming Data Analytics and Applications Minitrack*, Kauai, Hawaii, USA, January 2017.

JOURNAL PAPER REVIEWS

1. *IEEE Transactions on Neural Networks*
2. *Fuzzy Sets and Systems*
3. *Neural Computing and Applications*
4. *Decision Support Systems*
5. *Expert Systems with Applications*
6. *Simulation Modeling Practice and Theory*
7. *Information & Management*
8. *European Journal of Operational Research*
9. *Theoretical Issues in Ergonomics Science*
10. *Journal of Electronic Commerce Research*
11. *Journal of Environmental Management*
12. *Human Factors and Ergonomics in Manufacturing*
13. *Journal of Research and Practice in Information Technology*
14. *Information Systems Management*

BOOK REVIEWS

1. *Modular FORTRAN*, G. Bronson, Scott/Jones, Inc., Publishers, 1995.
2. *The Architecture of Computer Hardware and Systems Software*, I. Englander, 2nd edition, J. Wiley & Sons, 1997
3. *SAS Applications Programming: A Gentle Introduction*, F. DiIorio, Boston, MA: PWSKENT Publishing Company, 1991.
4. *Operating Systems: A Systematic View*, W.S. Davis and T. M. Rajkumar, 5th edition, 2001, Addison/Wesley.
5. *Database Management with Web Site Development Applications*, G. Riccardi, 2004, Addison-Wesley.
6. *Introduction to Business Data Mining*, D. Olson and Y. Shi, 2006, McGraw-Hill.
7. *Introduction to Statistics and Probability* (in Polish), T. Gorecki, 2006, Publisher was not determined then.
8. *The Architecture of Computer Hardware and Systems Software*, I. Englander, 3rd edition, 2001, John Wiley & Sons.

9. *The Architecture of Computer Hardware and Systems Software*, I. Englander, 4th edition, 2009, John Wiley & Sons.
10. *Data Mining: Concepts, Models, Methods & Algorithms*, M. Kantardzic, IEEE Press/Wiley, 2011.

GRANT PROPOSAL REVIEWS

1. *National Science Foundation (NSF), 2004, Washington, USA.*
2. *School of Computing, National University of Singapore, 2005, Singapore.*

PROFESSIONAL ORGANIZATIONS

1. Member of the Institute of Electrical and Electronics Engineers (IEEE), since 1992.
2. Member of the Association for Computing Machinery (ACM).

SERVICE (DEPARTMENT, SCHOOL, UNIVERSITY, COMMUNITY)

1. College of Business Award and Scholarship Committee (Spring 2017 – now).
2. Faculty Search Committee, Computer Information Systems Department (2011-2012).
3. College of Business Research Committee (2006 - 2010).
4. College of Business Undergraduate Curriculum Committee (2010 – 2016).
5. Committee for High Performance Computing (HPC), University of Louisville (2009-2010).
6. The Greater Louisville Inc., The Metro Chamber of Commerce, Louisville, KY, USA.Top TeN Awards Committee Member (2006).
7. College of Business Grievance Committee (2005).
8. College of Business Personnel Committee (2000-2004).
9. College of Business Recruitment and Retention Committee (Fall 2004 – Spring 2005).
10. College of Business International Officer, University of Louisville (1997-1999).
11. Member of the Faculty Search Committee, Computer Information Systems Department (1998-2000).
12. Member of the University of Louisville Provost Advisory Committee for International Affairs (1997-1999).
13. Computer Information Systems Department Co-op Faculty Coordinator (1996-1999).
14. Students' and Part-time Teachers' Mentor (1990-1995).
15. Member of the Athens, San Salvador, Singapore, and Hong Kong International MBA Programs Team (1996-2000).
16. Computer Information Systems Department Computer Lab Coordinator (1990-96).
17. Liaison between Information Technology and the Information Science and Data Processing Office (1990-1994).

HONORS, AWARDS, AND LICENSES

1. Distinguished Research and Development Award from the International Association of Assessing Officers for the paper by Zurada, J., A. S. Levitan and J. Guan, 2011, "A Comparison of Regression and Artificial Intelligence Methods in a Mass Appraisal Context", *Journal of Real Estate Research*, 33(3), 349-387.
2. The University of Louisville College of Business Faculty Excellence Award, 1998.
3. The University of Louisville Nomination for the Conference of Southern Graduate Schools 1998 Achievement Award for New Scholars, 1997.
4. School of Business Outstanding Scholarship Award, University of Louisville, 1996.
5. Gdansk University President's Award for developing the software package for computer-aided instruction (1981).
6. Designer of Software Systems License, awarded in 1979 by the Chief Chamber of Technology, Gdansk, Poland
7. Gdansk University President's Award for contribution to university's sponsored research (1975, 1978).

PERSONAL

Status: married, 1 child, U.S. citizen (naturalized), Polish citizen (by birth)
Languages: Polish (native)
Hobbies: bridge, basketball, soccer

REFERENCES AVAILABE UPON REQUEST