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DEPARTMENT OF MARKETING AND SUPPLY CHAIN MANAGEMENT,  
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## EDUCATION

TEXAS A&M UNIVERSITY, COLLEGE STATION, TEXAS  
*Ph.D. in Business Analysis, August 1986*

SAM HOUSTON STATE UNIVERSITY, HUNTSVILLE, TEXAS  
*M.B.A. in Business Administration, May 1982*

UNIVERSITY OF MADRAS, INDIA  
*B.Sc. Physics, May 1977*

## CONTACT INFORMATION

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## EXPERIENCE

UNIVERSITY OF OKLAHOMA, NORMAN, OKLAHOMA  
*Professor, Department of Marketing and Supply Chain Management*  
*August 2015 – Present*  
*Baldwin Chair in Business 2018 – Present*  
*Research Director, Center for the Business of Healthcare 2017 - 2019*

UNIVERSITY OF KENTUCKY, LEXINGTON, KENTUCKY  
*Professor, Gatton College of Business & Economics August 2001 – July 2015*

VISITING PROFESSOR, UNIVERSITY OF ROVIRA-VIRGILI, TARRAGONA, SPAIN  
*October 2011 – January 2012*

UNIVERSITY OF KENTUCKY, LEXINGTON, KENTUCKY  
*Associate Professor, School of Management, Gatton College of Business & Economics January 1998 – July 2001*

FLORIDA INTERNATIONAL UNIVERSITY, MIAMI, FLORIDA  
*Associate Professor, Department of Decision Sciences and Information Systems*  
*August 1992 – December 1997*

FLORIDA INTERNATIONAL UNIVERSITY, MIAMI, FLORIDA  
*Assistant Professor, Department of Decision Sciences and Information Systems*  
*August 1989 - August 1992*

UNIVERSITY OF NEBRASKA, LINCOLN, NEBRASKA  
*Assistant Professor, Department of Management*  
*August 1986 - July 1989*

## **PATENT**

A Data Shuffling Procedure for Masking Data (United States Patent # 7200757)

## **REFEREED JOURNAL PUBLICATIONS**

1. Domingo-Ferrer, J., K. Muralidhar, and M. Bras-Amoros, "General Confidentiality and Utility Metrics for Privacy-Preserving Data Publishing Based on the Permutation Model," *IEEE Transactions on Secure and Dependable Computing* (in print).
2. Lin, Y-X, L. Mazur, R. Sarathy, and K. Muralidhar, "Statistical Information Recovery from Multivariate Noise-Multiplied Data: A Computational Approach" *Transactions on Data Privacy* 11(1), 23-45, 2018.
3. Palk, L. and K. Muralidhar, "Free Ride: Data Brokers' Rent-Seeking Behavior and the Future of Data Inequality," *Vanderbilt Journal of Entertainment and Technology Law*, 20(3), 781-837, 2018.
4. Muralidhar, K., "Record Re-Identification of Swapped Numerical Microdata," *Journal of Information Privacy and Security*, 30(1), 34-45, 2017.
5. Domingo-Ferrer, J. and K. Muralidhar, "New Directions in Anonymization: Permutation Paradigm, Verifiability by Subjects and Intruders, Transparency to Users," *Information Sciences*, 337-338, 11-24, 2016.
6. Muralidhar, K., H. Li, and R. Sarathy, "Secure Attribute Sharing of Linked Microdata," *Decision Support Systems*, 81, 20-29, 2016.
7. Muralidhar, K., C. O'Keefe, and R. Sarathy, "A Bootstrap Mechanism for Response Masking in Remote Analysis Systems," *Decision Sciences* 46(6), 1199-1226, 2015.
8. Bambauer, J., K. Muralidhar, and R. Sarathy, "Fool's Gold! An Illustrated Critique of Differential Privacy," *Vanderbilt Journal of Entertainment and Technology Law* 16(4), 701-755, 2014.
9. Li, H., K. Muralidhar, R. Sarathy, and X. Luo, "Evaluating Re-identification Risks of Data Protected by Additive Data Perturbation," *Journal of Database Management* 25(2), 2014.

10. Muralidhar, K. and R. Sarathy, "Interval Responses for Queries on Confidential Attributes: A Security Evaluation." *Journal of Information Privacy and Security*, 9(1), 3-16, 2013.
11. Muralidhar, K. and R. Sarathy, "Statistical Dependence as the Basis for a Privacy Measure for Microdata Release," *International Journal of Uncertainty, Fuzziness, and Knowledge-based Systems*, 20(6), 893-906, 2012.
12. Li, H., K. Muralidhar, and R. Sarathy, "The Effectiveness of Data Shuffling for Privacy-Preserving Data Mining Applications," *Journal of Information Privacy and Security*, 8(2), 3-17, 2012.
13. Sarathy, R. and K. Muralidhar, "Evaluating Laplace Noise to Satisfy Differential Privacy for Numeric Data," *Transactions on Data Privacy*, 4(1), 1-17, 2011.
14. Trottini, M., K. Muralidhar, and R. Sarathy, "Maintaining Tail Dependence in Data Shuffling using t copulas," *Statistics and Probability Letters*, 81, 420-428, 2011.
15. Muralidhar, K. and R. Sarathy, "Generating Sufficiency Based Non-synthetic Perturbed Data," *Transactions on Data Privacy*, 1(1), 17-33, 2008.
16. Li, H., K. Muralidhar, and R. Sarathy, "Assessment of Disclosure Risk when using Confidentiality via Camouflage," *Operations Research*, 55(6), 1178-1182, 2007.
17. Muralidhar, K. and R. Sarathy, "A Comparison of Multiple Imputation and Data Perturbation for Masking Numerical Variables," *Journal of Official Statistics*, 22(3), 507-524, 2006.
18. Sarathy, R. and K. Muralidhar, "Secure and Useful Data Sharing," *Decision Support Systems*, 42(1), 204-220, 2006.
19. Muralidhar, K. and R. Sarathy, "Data Shuffling: A New Approach for Masking Numerical Data," *Management Science*, 52(5), 658-670, 2006.
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22. Muralidhar, K. and R. Sarathy, "A Theoretical Basis for Perturbation Methods," *Statistics and Computing*, 13(4), 329-335, 2003.
23. Sarathy, R., K. Muralidhar, and R. Parsa, "Perturbing Non-Normal Confidential Attributes: The Copula Approach," *Management Science*, 48(12), 1613-1627, 2002.

24. Sarathy, R. and K. Muralidhar, "The Security of Numerical Confidential Data in Databases," *Information Systems Research*, 13(4), 389-403, 2002.
25. Muralidhar, K., R. Parsa, and R. Sarathy, "An Improved Security Requirement for Data Perturbation with Implications for E-commerce," *Decision Sciences*, 32(4), 683-698, 2001.
26. Ruf, B., K. Muralidhar, R. Brown, J. Janney, K. Paul, "An Empirical Investigation of the Relationship Between Change in Corporate Social Performance and Financial Performance: A Stakeholder Theory Perspective," *Journal of Business Ethics*, 32(2), 143-156, 2001.
27. Muralidhar, K. and R. Sarathy, "Security of Random Data Perturbation Methods," *ACM Transactions on Database Systems*, 24(4), 487-493, 1999.
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29. Ruf, B., K. Muralidhar, and K. Paul, "The Development of a Systematic, Aggregate Measure of Corporate Social Performance," *Journal of Management*, 24(1), 110-133, 1998.
30. Muralidhar, K., K. Paul, and B. Ruf, "Corporate Social Monitoring: A Comparison of the Relative Values of Religious Activists and Public Affairs Officers," *Business & Professional Ethics Journal*, 15(2), 51-67, 1996.
31. Muralidhar, K., R.A. DeFusco, and G.V. Karels, "Skewness Persistence in U.S. Common Stock Returns: Results From Bootstrapping Tests," *Journal of Business Finance and Accounting*, 23(8), 1183-1195, 1996.
32. Muralidhar, K., D. Batra, and P.J. Kirs, "Accessibility, Security, and Accuracy in Statistical Databases: The Case for the Multiplicative Fixed Data Perturbation Approach," *Management Science*, 41(9), 1549-1564, 1995.
33. Muralidhar, K. and D. Batra, "An Investigation of the Effectiveness of Statistical Distributions for Additive Fixed Data Perturbation," *Computers and OR*, 22(7), 701-713, 1995.
34. Swenseth, S.R., K. Muralidhar, and R.L. Wilson, "Planning for Continual Improvement in a Just-In-Time Environment," *International Journal of Operations and Production Management*, 13(6), 4-22, 1993.
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40. Muralidhar, K. and M.J. Tretter, "The Impact of Special Requirements on the Estimation of Electrical Demand," *Management Science*, 37(3), pp. 368-373, 1991.
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46. Muralidhar, K. and M.J. Tretter, "The Evolution of an Expert DSS for Electric Utility Load Research," *Computers & Operations Research*, 16(3), pp. 247-256, 1989.
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## RESEARCH GRANTS AND CONTRACTS

1. Kentucky Science & Engineering Foundation (2004) “A Theoretical Framework for Data Masking.” (\$13,673)
2. Kentucky Department of Education (2009) “A Model Disclosure Audit of the 2008 Kentucky Performance Reports,” (\$20000)
3. West Virginia Department of Education (2011) “Best Practices for Preserving Confidentiality of Education Data.” (\$8000)
4. Kentucky P-20 Initiative (2012) “Security Assessment of P-20 Reports,” (\$18000)
5. Gatton Summer Research Grant (1999 – 2011)
6. The President A P J Abdul Kalam India Studies Research Program (2012 - 2013) “Privacy of Outsourced Data: A Survey of Indian Business Process Outsourcing Service Providers” (\$75,000)

## BOOK CHAPTERS

1. Ruiz, N., K. Muralidhar, and J. Domingo-Ferrer, “On the Privacy Guarantees of Synthetic Data: A Reassessment from the Maximum Knowledge Attacker Perspective,” J. Domingo-Ferrer and F. Montes (Eds.): PSD 2018, LNCS 11126, pp. 59–74, 2018
2. Muralidhar, K. and R. Sarathy, “Simulating Complex Supply Chain Relationships using Copulas,” *Encyclopedia of Information Science and Technology*, 5583-5594, 2017.
3. Muralidhar, K. and Domingo-Ferrer, J., “Rank-Based Record Linkage for Re-Identification Risk Assessment,” J. Domingo-Ferrer and M. Pejić-Bach (Eds.): PSD 2016, LNCS 9867, pp. 225–236, 2016.
4. Muralidhar, K., R. Sarathy, and Domingo-Ferrer, J., “Reverse Mapping to Preserve the Marginal Distributions of Attributes in Masked Microdata,” J. Domingo-Ferrer (Ed.): PSD 2014, Lecture Notes in Computer Science 8744, pp. 326–337, Berlin: Springer-Verlag, 2014.
5. McCaa, R., K. Muralidhar, R. Sarathy, M. Comerford, and A. Esteve-Palos, “Controlled Shuffling, Statistical Confidentiality and Microdata Utility: A Successful Experiment with a 10% Household Sample of the 2011 Population Census of Ireland for the IPUMS-International Database,” J. Domingo-Ferrer (Ed.): PSD 2014, Lecture Notes in Computer Science 8744, pp. 326–337, Berlin: Springer-Verlag, 2014.
6. Trottni, M., K. Muralidhar, R. Sarathy, “An Investigation of Model Based Microdata Methods for Magnitude Tabular Data,” In Josep Domingo-Ferrer and Ilenia Tinnirello (Editors), Lecture Notes in Computer Science: Privacy in Statistical Databases 2012, pp. 47-62, Berlin: Springer-Verlag, 2012.
7. Domingo-Ferrer, J., K. Muralidhar, and G. Rufiam-Torrel, “Anonymization Methods for Taxonomic Microdata,” In Josep Domingo-Ferrer and Ilenia Tinnirello (Editors), Lecture Notes in Computer Science: Privacy in Statistical Databases 2012, pp. 90-102, Berlin: Springer-Verlag, 2012.

8. Sarathy, R. and K. Muralidhar, "Perturbation Methods for Protecting Microdata: Evolution and Evaluation," In R. Chakraborty, C.R. Rao, and P. Sen (Editors), *Handbook of Statistics: Bioinformatics in Human Health and Heredity*, pp. 513-532, Amsterdam: Elsevier, 2012.
9. Muralidhar, K. and R. Sarathy, "Does Differential Privacy Protect Terry Gross' Privacy?" In Josep Domingo-Ferrer and Emmanouil Magkos (Eds.) *Lecture Notes in Computer Science: Privacy in Statistical Databases 2010*, pp. 200-209, Berlin: Springer-Verlag, 2010.
10. Sarathy, R. and K. Muralidhar, "Some Additional Insights on Applying Differential Privacy for Numeric Data," In Josep Domingo-Ferrer and Emmanouil Magkos (Eds.) *Lecture Notes in Computer Science: Privacy in Statistical Databases 2010*, pp. 210-219, Berlin: Springer-Verlag, 2010.
11. Trottini, M., Muralidhar, K. and R. Sarathy, "A Preliminary Investigation of the Impact of Gaussian versus t-copulas for Data Perturbation," In Josep Domingo-Ferrer and Yucel Saygin (Eds.) *Lecture Notes in Computer Science: Privacy in Statistical Databases 2008*, pp 127-138, Berlin: Springer Verlag, 2008.
12. Muralidhar, K., Sarathy, R., & Dandekar, R. "Why Swap when you can Shuffle? A Comparison of the Proximity Swap and Data Shuffle for Numeric Data," In Josep Domingo-Ferrer and Luisa Franconi (Eds.) *Lecture Notes in Computer Science: Privacy in Statistical Databases*, pp. 164-176, Berlin: Springer Verlag, 2006.
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14. Muralidhar, K., "Monte Carlo Methods for Organizational Decision Making," in H. Bidgoli (Editor), *Encyclopedia of Information Systems (Volume 3)*, 193-201, 2003.
15. Ruf, B., K. Muralidhar, and K. Paul, "Corporate Social Responsibility in Accounting: A Review and Extension," in *Research in Accounting Ethics*, L.A. Ponemon (Editor), 185-200, 1998.

## **CONFERENCE PROCEEDINGS**

- Muralidhar, K., R. Pavur, K. Keeling, and R. Sarathy, "Overcoming Limitations of Excel Trendline Functions: A Nonparametric Alternative," 2016 Annual Meeting of the Decision Sciences Institute, Austin, TX, November 19-22, 2016.
- Muralidhar, K. and R. Sarathy, "Copula Models for Big Data using Data Shuffling," 2016 Southwest Decision Sciences Institute, Oklahoma City, OK, March 10-13, 2016.

- Muralidhar, K., "Re-Identification Risk in Swapped Microdata Release," 2015 Northeast Decision Sciences Institute Meeting, Cambridge, MA, March 20-22, 2015.
- Muralidhar, K. and R. Davidson, "Safe Harbor: Is That All There is to Healthcare Data Privacy?" 2015 Northeast Decision Sciences Institute Meeting, Cambridge, MA, March 20-22, 2015.
- Muralidhar, K., R. Sarathy, and H. Li, "Securely Sharing Identified Data," 2014 Annual Meeting of the Decision Sciences Institute, Tampa, FL, November 21-24, 2014.
- Muralidhar, K., C. M. O'Keefe, and R. Sarathy, "A General Methodology for Masking Output from Remote Analysis Systems," UNECE/EUROSTAT Work Session on Statistical Data Confidentiality, Ottawa, Canada, October 28-30, 2013.
- R. McCaa, K. Muralidhar, R. Sarathy, M. Comerford, A. Esteve, "Analytical tests of controlled shuffling to protect statistical confidentiality and privacy of a ten per cent household sample of the 2011 census of Ireland for the IPUMS-International database," UNECE/EUROSTAT Work Session on Statistical Data Confidentiality, Ottawa, Canada, October 28-30, 2013.
- K. Muralidhar, R. Sarathy, and M. Trottni, "Consistency of Output from Remote Access Servers, Microdata, and Tabular Data Release: The Need for Common Performance Metrics," UNECE/EUROSTAT Work Session on Statistical Data Confidentiality, Ottawa, Canada, October 28-30, 2013.
- Muralidhar, K. and R. Sarathy, "Disclosure Risk when Responding to Queries with Deterministic Guarantees," UNECE/EUROSTAT Worksession on Statistical Data Confidentiality, Tarragona, Spain, October 26-28, 2011.
- Sarathy, R. and K. Muralidhar, "Differential Privacy for Numeric Data," UNECE/EUROSTAT Worksession on Statistical Data Confidentiality, Bilbao, Spain, December 2-4, 2009.
- Muralidhar, K. and R. Sarathy, "Numerical Data Masking Techniques for Maintaining Sub-Domain Characteristics," UNECE/EUROSTAT Worksession on Statistical Data Confidentiality, Manchester UK, December 17-19, 2007.
- Sarathy, R. and K. Muralidhar, "Securing Outsourced Data: State of the Art and Future Research Directions," International Symposium on Information Systems, Hyderabad, India, December 16-18, 2006.
- Muralidhar, K., Sarathy, R., & Dandekar, R. "Why Swap when you can Shuffle? A Comparison of the Proximity Swap and Data Shuffle for Numeric Data," Privacy in Statistical Databases, Rome, Italy, December 13-15, 2006.
- Li, H., R. Sarathy, and K. Muralidhar, "Assessment of Re-identification Risks of General Additive Perturbation Using Record Linkage," 2005 Annual Meeting of the Decision Sciences Institute, San Francisco, CA, November 2005.



- Muralidhar, K. and R. Sarathy, "A Combined Methodology for Assessing Identity and Value Disclosure Risk for Numerical Microdata," UNECE Work session on statistical data confidentiality, Geneva, Switzerland, November 9-11, 2005.
- Muralidhar, K. and R. Sarathy, "Can You Have Your Cake and Eat it Too? Sharing Healthcare Data without Compromising Privacy and Confidentiality," Americas Conference on Information Systems, Omaha, NE, August 2005. *Best Paper Award.*
- Muralidhar, K. and R. Sarathy, "Data Shuffling: A Procedure for Masking Numerical Microdata," International Conference on the Future of Statistical Theory and Practice, Hyderabad, India., January 2005.
- Muralidhar, K. and R. Sarathy, "Recent Advances in Data Perturbation," *Proceedings of the 2003 Annual Meeting of the Decision Sciences Institute*, Washington DC, November 2003.
- Sarathy, R. and K. Muralidhar, "What do they Know? An Assessment of Security Risk," *Proceedings of the 2002 Annual Meeting of the Decision Sciences Institute*, San Diego, CA, November 2002.  
*Best Interdisciplinary Paper Award*
- Muralidhar, K. and R. Sarathy, "Modeling and Simulating Complex Dependence in Supply Chains," *Proceedings of the 2002 Annual Meeting of the Decision Sciences Institute*, San Diego, CA, November 2002.
- Sarathy, R., K. Muralidhar, and R. Parsa, "Issues in Perturbing Non-Normal Confidential Attributes," *Proceedings of the Americas Conference on Information Systems*, Boston, MA, August, 2001.
- Muralidhar, K., R. Parsa, and R. Sarathy, "Random Data Perturbation for Non-normal Data," *Proceedings of the 2000 Annual Meeting of the Decision Sciences Institute*, Orlando, FL, November, 2000.
- Muralidhar, K., R. Parsa, and R. Sarathy, "Optimal Bias and Security Conditions for Random Data Perturbation," *Proceedings of 1999 Annual Meeting of the Decision Sciences Institute*, New Orleans, LA, November, 1999.
- Parsa, R.A., K. Muralidhar, and R. Sarathy, "Optimal Methods of Data Perturbation," *1998 Proceedings of the Section on Government Statistics of the American Statistical Association.*
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- Muralidhar, K., R. Sarathy, and R. Parsa, "Maintaining the Relationship Between Confidential and Non-Confidential Attributes in Statistical Databases," *Proceedings of the 1996 Annual Meeting of the Decision Sciences Institute*, Orlando, FL, 1996.
- Sarathy, R. and K. Muralidhar, "A Bootstrapping Approach to GDSS Research," *Proceedings of the 1996 Annual Meeting of the Decision Sciences Institute*, Orlando FL, 1996.
- P.J. Kirs, K. Muralidhar, and L. Vijayasathy, "Assessing MIS Journal Criteria: An AHP Evaluation," *Proceedings of the 1994 Annual Meeting of the Decision Sciences Institute*, Honolulu, HI, 1994.
- Ruf, B., K. Muralidhar, and K. Paul, "A View of Providers and Users of Social Information," *1994 ABO Conference: Frontiers in Behavioral Research*, San Antonio, TX, 1994.
- Dube, L. and K. Muralidhar, "The Impact of Aggregation Methods on the Analytic Hierarchy Process," *Proceedings of the 1993 Annual Meeting of the Decision Sciences Institute*, 1030-1032, 1993.
- Muralidhar, K., D. Batra, and P.J. Kirs, "Statistical Database Security Approaches for Organizational Databases: Research Considerations in Fixed Data Perturbation," *Proceedings of the 1993 Annual Meeting of the Decision Sciences Institute*, 924-926, 1993.
- Ruf, B., K. Muralidhar, and K. Paul, "Eight Dimensions of Corporate Social Performance: Determination of Relative Importance Using the Analytic Hierarchy Process," *1993 Academy of Management Best Paper Proceedings*, Atlanta, 1993 (The paper was nominated for the best paper award).
- Swenseth, S.R., R.L. Wilson, and K. Muralidhar, "Applying Learning Models in Pull Production Processes," *Proceedings of the 1990 Annual Meeting of the Decision Sciences Institute*, 1766-1768, 1990.
- R.L. Wilson, Swenseth, S.R., and K. Muralidhar, "The Effect of Demand and Process Time Variation on Capacity Determination in a 'Pull' Production System: A Simulation Study," *Proceedings of the 1989 Annual Meeting of the Decision Sciences Institute*, pp. 987-989, 1989.
- Muralidhar, K., S.R. Swenseth, and R.L. Wilson, "A Simulation Study of the Impact of Differences Between Japanese and American Organizations and the Use of Just-in-Time Technology," *Papers and Proceedings of the Pan-Pacific Conference VI*, pp. 466-468, 1989.

- S.R. Swenseth, K. Muralidhar, and F.P. Buffa, "The Transferability of Japanese Manufacturing Techniques: Quantitative Measures for the Decision Maker," *Papers and Proceedings of the Pan-Pacific Conference VI*, pp. 211-213, 1989.
- Muralidhar, K. and M. Schniederjans, "A Modified Scheduling Method for Random Process FMS Production," *Proceedings of the 1988 Annual Meeting of the Decision Sciences Institute*, pp. 1204-1206, 1988.
- Muralidhar, K. and M.J. Tretter, "Bootstrap Methods - An Application for the Electric Utility Industry," *Proceedings of the 1987 Annual Meeting of the Decision Sciences Institute*, pp. 1011-1013, 1987.
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- Muralidhar, K., D.L. Olson, and J. Mote, "Problems in Using Linear Programming an  $L_1$  Metric Discriminant Procedure," *Proceedings of the 1984 National Meeting of the American Institute of Decision Sciences*, 1984.

## **PRESENTATIONS**

- Ruiz, N., J. Domingo-Ferrer, and K. Muralidhar, "Connecting privacy models and statistical disclosure control methods through bistochastic anonymization," UNECE/EUROSTAT Work Session on Statistical Data Confidentiality, The Hague, Holland, October 29-31, 2019.
- Muralidhar, K. and R. Sarathy, "Privacy, Confidentiality, Disclosure: What is the Difference?" UNECE/EUROSTAT Work Session on Statistical Data Confidentiality, The Hague, Holland, October 29-31, 2019.
- Muralidhar, K. and R. Sarathy, "Statistical Basis for Data Privacy and Confidentiality," International Conference on Statistical Distributions, Grand Rapids, MI, October 10-12, 2019.
- Muralidhar, K. and J. Domingo-Ferrer, "Mahalanobis distance-based record linkage revisited," UNECE/EUROSTAT Work Session on Statistical Data Confidentiality, Skopje, FYROM, September 20-22, 2017.
- Muralidhar, K. and J. Domingo-Ferrer, "Microdata Masking as Permutation," UNECE/EUROSTAT Work Session on Statistical Data Confidentiality, Helsinki, Finland, October 5-7, 2015.
- Muralidhar, K. "Microdata Masking," Expert Panel on Confidentiality Protection National Center for Science and Engineering Statistics National Science Foundation, Washington D.C., September 17-18, 2015

- Domingo-Ferrer, J. and K. Muralidhar, "Protecting Against Maximum-Knowledge Adversaries in Microdata Release: Analysis of Masking and Synthetic Data Using the Permutation Model," Data Without Boundaries, 2<sup>nd</sup> European Data Access Forum, Luxembourg, March 22-24, 2015.
- Li, H., K. Muralidhar, R. Sarathy, "Privacy-Preserving Scalar Product Algorithms for Vertically Partitioned Data," Symposium on Healthcare and Analytics in Research & Practice (SHARP) 2014, Chattanooga, TN, October 15-17, 2014.
- Sarathy, R. and K. Muralidhar, "Evaluating the Characteristics of Input and Output Perturbation in the Context of Dinur-Nissim Disclosure Results," 4th IAB Workshop on Confidentiality and Disclosure - SDC for Microdata, Nuremberg, Germany, June 2011.
- Muralidhar, K. and R. Sarathy, "Differential Privacy in the Context of Masking Numerical Data," INFORMS Annual Meeting, Austin, TX, October 2010.
- Muralidhar, K. and R. Sarathy, "Does Differential Privacy Protect Terry Gross' Privacy?" Privacy in Statistical Databases 2010, Corfu, Greece, 2010.
- Sarathy, R. and K. Muralidhar, "Some Additional Insights on Applying Differential Privacy for Numeric Data," Privacy in Statistical Databases 2010, Corfu, Greece, 2010.
- Muralidhar, K. and R. Sarathy, "Privacy Violations in Accountability Data Released to the Public by State Educational Agencies," Federal Committee on Statistical Methodology Conference, Washington DC, November 2-4, 2009.
- Muralidhar, K. and R. Sarathy, "A Theoretical Comparison of Data Masking Techniques for Numerical Microdata," 3rd IAB Workshop on Confidentiality and Disclosure - SDC for Microdata, Nuremberg, Germany, November 20-21, 2008.
- Sarathy, R. and K. Muralidhar, "Sufficiency-based Non-Synthetic Perturbation Approach," 3rd IAB Workshop on Confidentiality and Disclosure - SDC for Microdata, Nuremberg, Germany, November 20-21, 2008.
- Muralidhar, K. "A Comparison of Numerical Data Masking Techniques," A Panel Discussion on balancing Data Quality and Confidentiality, UNECE Worksession on Statistical Data Confidentiality, Manchester UK, December 17-19, 2007.
- Muralidhar, K. and R. Sarathy, "'Easy to Implement' is Putting the Cart before the Horse: Effective Techniques for Masking Numerical Data", Federal Committee on Statistical Methodology Conference, Washington DC, November 5-7, 2007.
- Muralidhar, K., "Data Masking for Preserving Confidentiality of Data: State of the Art and Future Research Directions", Department of Management, Indian Institute of Technology - Madras, September 10, 2007.

- Muralidhar, K. and R. Sarathy, "The Myth of Micro-Aggregation," INFORMS Annual Conference, Pittsburgh, November 5-7, 2006.
- Sarathy, R. and K. Muralidhar, "A Unified Approach for Measuring Identity and Value Disclosure," CS-Statistics Workshop On Privacy and Confidentiality, University of Bologna Residential Center, Bertinoro (Forli), Italy, July 9-15 2005.
- Muralidhar, K. and R. Sarathy, "Can you eat your cake and have it too? Sharing healthcare data without compromising privacy or confidentiality," The 12th Annual HIPAA Summit, Washington DC, April 2006.
- Muralidhar, K. and R. Sarathy, "A Combined Methodology for Assessing Identity and Value Disclosure Risk for Numerical Microdata," UNECE/EUROSTAT Work session on Statistical Data Confidentiality, November 9-11, Geneva, Switzerland, 2005.
- Muralidhar, K. and R. Sarathy, "Why Multiply Impute when you can Sufficiently Perturb," INFORMS Annual Conference, Denver, October 24-27, 2004.
- Muralidhar, K. and R. Sarathy, "Disclosure Risk and Data Utility Characteristics of Data Swapping: A Preliminary Investigation," Ninth INFORMS Conference on Information Systems and Technology (CIST), Denver, Colorado, October 23-24, 2004.
- Muralidhar, K. and R. Sarathy, "Access, Data Utility and Privacy," NSF Workshop on Confidentiality, Washington DC, May 2003.
- Muralidhar, K. and R. Sarathy, "Masking Numerical Data: Past, Present, and Future," Confidentiality and Data Access Committee of the Federal Committee on Statistical Methodology, Washington DC, April 2003.
- Muralidhar, K. and R. Sarathy, "Recent Advances in Perturbation Methods," Joint ECE/EUROSTAT Work Session on Data Confidentiality, Luxembourg, April 2003.
- Muralidhar, K. and R. Sarathy, "The Data Shuffle: A New Masking Procedure for Numerical Data," 8<sup>th</sup> INFORMS Computing Society Conference, Chandler, AZ, January 2003.
- Muralidhar, K. and R. Sarathy, "Complete Access, Data Utility, and Privacy are NOT Always Mutually Exclusive," Association Public Data Users Conference, Washington DC, October 21, 2002.
- Muralidhar, K. and R. Sarathy, "The Two Step Data Shuffle: A New Masking Procedure," Invited seminar presented to the Census Bureau, Washington DC, May 21, 2002.
- Muralidhar, K. and R. Sarathy, "Preserving Confidentiality: Perturbation and Swapping," 2001 INFORMS Annual Meeting, Miami Beach, FL, November 2001.

- Muralidhar, K. (Presenter and Participant), Mini-conference on *Innovative Approaches for Teaching with Spreadsheets*, 2000 Annual Meeting of the Decision Sciences Institute, Orlando, FL, November 2000.
- Muralidhar, K., "Teaching Quantitative Methods using Excel: Evaluating Students," 1999 INFORMS Spring Conference, Cincinnati, OH, May, 1999.
- Ruf, B., K. Muralidhar, R. M. Brown, and K. Paul, "An Empirical Investigation of the Relationship Between Corporate Social and Financial Performance," Proceedings of the 1996 Annual Meeting of the International Association for Business & Society, Santa Fe, NM, March, 1996
- Ruf, B., K. Muralidhar, and P.J. Kirs, "Measurement and Inter-Country Comparison of Corporate Environmental Performance," 1994 Annual Meeting of the Decision Sciences Institute, Honolulu HI, November 1994.
- Muralidhar, K., K. Paul, and B. Ruf, "A Comparison of the Relative Values of Religious Activists and Public Affairs Officers," 1994 Annual Meeting of the International Association for Business and Society, Hilton Head, SC, March, 1994.
- Muralidhar, K., P.J. Kirs, and R. Sarathy, "Test of Variance in GDSS Research," 1993 Annual Meeting of the Decision Sciences Institute, Washington D.C., November, 1993.
- Muralidhar, K., R.A. DeFusco, and G.V. Karels, "Skewness Persistence in Common Stock Returns: Another Look," 1990 Financial Management Association Meeting, October 24-27, 1990.
- Muralidhar, K., S.R. Swenseth, and R.L. Wilson, "Reducing Processing Time Variation in a JIT Setting - A Learning Model," Joint National Meeting of ORSA/TIMS, Las Vegas, May 7-9, 1990.
- Wilson, R.L. and K. Muralidhar, "A New Algorithm for Prioritizing Decision Alternatives," Joint National Meeting of the CORS/TIMS/ORSA, Vancouver, Canada, May 8-10, 1989.
- Muralidhar, K., M.A. Venkatramanan, and K. Wilson, "Large Scale Bootstrap Applications Using Vector Processing," The 1989 Annual Meeting of the Decision Sciences Institute, New Orleans, November 20-22, 1989.
- Muralidhar, K., R. Santhanam, and M. Schniederjans, "A Zero-One Goal Programming Approach to MIS Project Selection," Joint National Meeting of ORSA/TIMS, Washington D.C., April 25-27, 1988.
- DeFusco, R.A., G.V. Karels, and K. Muralidhar, "Signalling and the Returns to Company Name Changes," Joint National Meeting of ORSA/TIMS, Washington D.C., April 25-27, 1988.

Muralidhar, K. and M.J. Tretter, "A Methodology to Monitor Changes in the Distribution of Electrical Demand Over Time," Joint National Meeting of ORSA/TIMS, 1987.

Muralidhar, K., "Stratifying Nonnormal Populations: A Simulation Study," The Annual Meeting of the Decision Sciences Institute, Honolulu, November 23-25, 1986.

### **PROFESSIONAL AFFILIATIONS**

Institute for Management Science

Decision Sciences Institute

American Statistical Association

### **SERVICES TO PROFESSIONAL ASSOCIATIONS**

Organizing Committee, UNECE Worksession on Statistical Disclosure Limitation, (2017-Current)

Organizing Committee, Privacy in Statistical Databases Conference (2014- Current).

Editorial Board, Transactions on Data Privacy (2013 - Current)

Editorial Board, Journal of Information Privacy and Security (2013 - Current)

Associate Editor, *Management Science* (2006-2009)

Editorial Board Member, International Journal of Services Sciences (2007-Current)

Editorial Review Board, *Decision Sciences* (2004-2006)

Ad Hoc Associate Editor, *Operations Research*

Organizing Committee, Privacy in Statistical Databases Conference (2008, 2010, 2012)

Organizing Committee, UNECE Work Session on Statistical Disclosure Limitation (2017)

Member, Privacy Advocacy Group, Data Quality Campaign (2010 – 2011)

Member, American Statistical Association's Committee on Privacy and Confidentiality (2010 – 2012)

Reviewer for *Management Science*, *Decision Sciences*, *Operations Research*, *Naval Research Logistics*, *Computers & Operations Research*, *Information Systems Research*, *Omega*, *Journal of Flexible Manufacturing Systems*, *Information Technology and Management*, and other journals.

### **AWARDS AND HONORS**

2019 Bruce Magoon Master Teacher Award, Price College of Business, University of Oklahoma.

Inaugural Distinguished Doctoral Alumni, Mays Business School, Texas A&M University, 2006.

Best Paper Award, SIG Health, 2005 America's Conference on Information Systems.

Best Interdisciplinary Paper Award, 2002 Annual Meeting of the Decision Sciences Institute.

Gatton Endowed Professorship, Gatton College of Business and Economics, University of Kentucky (2001 – Current).

Research Professorship, Gatton College of Business and Economics, University of Kentucky (1999 – 2000).

Excellence in Research Award, Florida International University Foundation, 1995.

Teaching Incentive Program Award from the Florida State University System, 1994.

Outstanding Achievement Award, College of Business Administration, Florida International University (1990, 1994).

Minority Faculty Development Award (1991, 1990)