

(Ms.) Uma G. Gupta, Ph.D., MBA, M.Sc  
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**EDUCATION:** **Ph.D., Industrial Engineering**, 1991  
University of Central Florida, Orlando, FL  
*Concentration:* Artificial Intelligence and Expert Systems  
**Master of Business Administration (M.B.A)**, 1985  
University of Central Florida, Orlando, FL  
**Master of Science - Mathematics**, 1979  
Stella Maris College, India  
**Bachelor of Science - Mathematics**, 1977  
Stella Maris College, India

**PROFESSIONAL EXPERIENCE:**

2019 - Present: **University of South Carolina at Upstate**  
Director of Business Analytics  
Department of Management, Entrepreneurship, and Marketing

2003 – 2019: **State University of New York**  
Professor of Management (2007-Present), Buffalo State College  
Visiting Scholar, University of New Hampshire (Spring 2016)  
Senior Advisor, Program and Scholarship Development (2007-2008)  
Senior Advisor to SUNY Chancellor for STEM (2006-2007)  
President, Alfred State College (2003-2006)

2012-2013: **Fulbright Scholar, University of Malta, Malta**  
Fulbright Specialist (2015-2019)

2000-2003: **Dean, College of Technology**  
University of Houston, Houston, Texas

1997-2000: **Jack and Joan McGraw Endowed Chair in Technology**  
**Full Professor**  
Creighton University,  
College of Business Administration  
Department Chair/Program Chair

1996-1997: **Associate Professor, Department of Decision Sciences**  
East Carolina University  
(Assistant Professor – 1993 -1996)

1990-1993: **Assistant Professor of Management,**  
University of Central Florida, Orlando, FL

1988-1989: **Research Assistant:**  
Artificial Intelligence Division, Honeywell Inc.

**Summary Data on Research Productivity:**

<b>Books (Authored &amp; Edited)</b>	<b>5</b>
<b>Book In-Progress (AI)</b>	<b>1</b>
<b>Refereed Journal Publications</b>	<b>50</b>
<b>Conference Proceedings</b>	<b>49</b>
<b>Journal Editorial Review Boards</b>	<b>4</b>

### Books

1. Gupta, Uma G., *The Art and Science of Prompt Engineering*. Conella Publishing. Work-in-progress. Expected publication date: Jan. 2025.
2. Gupta, Uma G., and San Cannon. *A Practitioner's Guide to Data Governance: A Case-Based Approach*. Emerald Publishing, 2020. ISBN-13: 978-1789735703. 288 pages.
3. Reilly, R., Gupta, U., and Nyaboga, A., *Introduction to Management Information Systems, 2015*. Kendall Hunt Publications. ISBN-10:1465279598.
4. Gupta, Uma., *Introduction to Management Information Systems*, Prentice Hall, 1999. ISBN-10: 1465279598. 490 pages.
5. Gupta, Uma., *Management Information Systems: A Managerial Perspective*, West Publishing, 1996. ISBN-10:0314068058. 600 pages.
6. Gupta, Uma., *Validating and Verifying Expert Systems: A Readings Book*. (Editor), Los Almitos, CA: IEEE, 1991. ISBN-0818689951, 409 pp.

### Refereed Journal Publications

1. Gupta, U.G., and Cooper, S., (2024), "The Role and Impact of Microlearning on the Future of Business Education," **AIMS International Journal of Management**, September 2024.
2. Gupta, U. (2023), "How to Bridge the Gap Between AI Ethical Guidelines and Responsible Ethical Conduct," **AIMS International Journal of Management**, Volume 17, No:1, 2023. <http://aims-international.org/AIMSijm/17-1.asp>
3. Aydoğdu, Murat and Gupta, U. (2023), "An Analysis of Data Visualization Course Syllabi," **Business Education Innovation Journal**, Vol. 15, No:1, June 2023.
4. Gupta, U.G., and Cooper, S., (2022) "An Integrated Framework for Responsible Management Education: Building Common Ground," **Journal of Global Responsibility**. Vol. 13, Issue 1, 2021. ISSN: 2041-2568
5. Gupta, U.G., (2022) A Graduate Course in Data Governance: A Service-Learning Approach, **Journal of Education for Business**, Vol. 97, Issue 5.
6. Gupta, U.G., and Cannon, S.,(2020) "A Review of Data Governance Definitions and Emerging Perspectives," **The International Journal of Data Analytics (IJDA)**, Vol. 1, Issue: 2, 2020.
7. Gupta, U.G., Gupta, A., (2016) Vision: A Missing Key Dimension in the 5V Big Data Framework," **Journal of International Business Research and Marketing**, Volume 1, Issue 3: pg. 46-52.
8. Gupta, U.G., Massa, N.P. and Azzopardi, J. "Culture and intellectual capital: towards a conceptual framework", **International Journal of Organizational Analysis**, Vol. 24 No. 3, pp. 438-453, 2016.
9. Gupta, U., (2015) "Teaching Business Students the Art and Science of Innovation," **Business Education Innovation Journal**, Vol. 7, #1, June 2015.
10. Lai, Christine, and Gupta, U., (2013) "Marketing Study Abroad Programs: Influence of Facilitating and Deterring Factors of Student Participation,"

- International Journal of Business Strategy**, Vol. 113, #3, 2013, pp.39-47.
11. Gupta, Uma, "Embracing Global Diversity: Opportunities and Challenges for Leaders," **John Ben Shepperd Journal of Practical Leadership**, Spring 2007, pg. 127-133.
  12. Gupta, Uma., "Virtual Workspaces in Engineering Environments: Implications for Engineering Education," **Journal of Engineering Technology**, Fall 2004.
  13. Goss, Ernie, and Uma G. Gupta. "Women and the Internet: Is there an Economic Payoff?" **Communications of the ACM**, Fall 2004
  14. Braunstein, Dan, and Uma G. Gupta. "Technical Wizards, Lousy Managers: Avoiding Disasters in Promoting and Hiring IT Management." **Information Strategy: The Executive's Journal**. Winter 2001, pg. 16-21.
  15. Gupta, Uma G., and Lynne E. Houtz. "Nebraska High School Student's Computer Skills and Attitudes." **Journal of Research on Computing in Education**. Spring 2001; Vol. 33, Iss. 3; pg. 316-327.
  16. Gupta, Uma G., and Lynne E. Houtz. "High School Students' Perceptions of Information Technology Skills and Careers." **Journal of Industrial Technology**. August 2000; Vol. 16, No.4.
  17. Royce, George., and Gupta, Uma., "Resource estimation of information systems projects: a case study," (2001) **Journal of International Information Management**, Volume 9, Number 1, Spring 2000, pp.47-58
  18. Gupta, Uma G., and V. Raval, "Anchoring Offshore Project: Critical Success Factors for Executives," **Information Systems: The Executive Journal**, Winter 1999), pp. 21-27
  19. Butler, Randy W., Uma G. Gupta, and Thomas D. Milner. "Leading Without Bleeding: An Information Technology Case Study at Union Pacific Railroad. " **Journal of Transportation Management**, Fall 1999, pg. 44-54.
  20. Gupta, Uma G., "MIS and Manufacturing: A Marriage Turning Sour?" **Production and Inventory Management Journal**, 1999, pp.11-15
  21. Validation techniques for Case-Based Reasoning Systems, (with Gonzalez, A., and Lingli Xu), **IEEE Transactions on Systems, Man, and Cybernetics**, July 1998, pp. 465-477.
  22. An Automatic Intelligent Test Case Generator for Rule-based Expert Systems, **Communications of the ACM**, April 1998 (electronic version)
  23. Auditing Information Systems: An Executive Perspective, **Information Strategy: The Executive Journal** (with Raval, V.), Vol. 14, No: 4, Summer 1998, pp. 22-28 (with V. Raval)
  24. Using Citation Analysis to Explore the Intellectual Base, Knowledge Dissemination, and Research Impact of *Interfaces*, **Interfaces**, 27(2), March-April 1997, pp. 85-101.
  25. performance Evaluation of a Large Diagnostic Expert System Using a Heuristic Test Case Generator, **Engineering Applications of Artificial Intelligence** (with Gonzalez, a. and Chianesle, B.), Vol. 9, No: 3, 1997, pp. 275-284.
  26. The New Revolution: Intranets, Not Internets, **Production and Inventory**

- Management Journal**, Vol. 38, No: 2, Second Quarter, 1997, pp. 16-21.
27. The Impact of Information Systems on the Efficiency of Banks: An Empirical Investigation, **Industrial Management and Data Systems**, (with Collins, W.) Volume 1, 1997, pp. 10 –16.
  28. The Contribution of Information Systems to Manufacturing Productivity: An Empirical Investigation of Differences between Small Firms and Large Firms, **Information and Management**, (with Capen, M.), Volume 31, 1996, pp. 227-233.
  29. Theory and Applications of the Delphi: A Bibliography (1974-1994), **Technological Forecasting and Long-range Planning: An International Journal**, Vol. 53, 1996, pp. 185-211.
  30. A Multiple Criteria Buy versus Lease Analysis for Government Contracts, **IEEE Transactions on Engineering Management**, (with Mollaghasemi, M., Edward, J.), 42(3), August 1995.
  31. A Classification Framework for Case-Based Reasoning Systems, **The New Review of Applied Expert Systems** (with Bradley, J.), Vol.1, 1995, pp. 35-48.
  32. The Academic Quality of AI Journals and the Role of AI in the MIS Curriculum: Perspectives of Business Faculty, **Expert Systems with Applications**, 7(4), 1994, pp. 581-588.
  33. How Cased-Based Reasoning Solves New Problems, **Interfaces**, 24(6), December 1994, pp. 110-119.
  34. Applying Case-based Reasoning to the Accounting Domain, **International Journal of Intelligent Systems in Accounting, Finance, and Management**, (with Brown, C.E.), 3, November - December 1994, pp. 205-221.
  35. An Empirical Investigation of the Contribution of Information Systems to Manufacturing Productivity, **Industrial Management and Data Systems**, March/April 36(2), 1994, pp.15-18.
  36. Evaluation of Four PC-Based Authoring Systems for Business Instruction, **Journal of Computer Information Systems**, (with Haga, C.), 34(3), Spring 1994, pp. 24-28.
  37. Validation and Verification of Knowledge-based Systems: A Survey, **Journal of Applied Intelligence**, 3, 1993, pp. 343-363.
  38. Technology and Compliance under the Americans With Disabilities Act, *Chapter in Handbook of Resource Information Systems 1993 Supplement* (With Bogumil, W.), (Ed. Lederer), Warren, Gorham and Lamont, New York, NY 1993, pp. 11-21.
  39. Business Trends: Downsizing, **Data Resource Management Journal**, 4(2), Spring 1993, pp. 68-72.
  40. IS and Americans with Disabilities Act: New Challenges for IS Management, **Journal of Information Systems Management**, (with Bogumil, W.), Summer 1993, pp. 74-77.
  41. Enabling the Disabled through Computer Technology, **Journal of Management Systems**, 4(2), 1992, pp. 61-72.
  42. Virtual Reality: A Computerized Illusionary World, **Journal of Computer Information Systems**, 33(2), Winter 1992, pp. 46-50.
  43. Outsourcing the IS Function, **Journal of Information Systems Management**,

- (with Gupta, A.), 9(3), Summer 1992, pp. 44-50.
44. A Framework for Testing Knowledge-Based Systems, *Systems Development Management*, Auerbach Publications, Research Institute of America, Inc., New York, NY, 4(1), June 1992, 33-37.
  45. Global Networks: Promises and Challenges, *Journal of Information Systems Management*, 9(4), Fall 1992, pp. 28-32.
  46. Successful Deployment Strategies for Outsourcing, *Journal of Information Systems Management*, 9(1), Winter 1992, pp. 21-27.
  47. The Need for a National Maternity Policy in the USA, *International Journal of Manpower*, (with Hosni, D.), 8(5), 1987, pp. 12-17.
  48. Strategic Issues in Information Systems for Accountants,” *6-module web course developed for the University of Phoenix*. The course applies toward CPE credit for accountants, 1997.

#### **Conference Proceedings and Workshops**

1. (2024) The Sleeping Giant Wakes: *Building AI Literacy in Higher Education*, **First Annual University of South Carolina Upstate AI Conference**, September 27, 2024
2. (2023) **Invited Presentation:** 76th Annual Conference, National Conference of Academic Deans, Changes in Higher Education: From Surviving to Thriving, July 19 – 21, 2023, Conway, AR. Program Schedule: <https://uca.edu/ncad/2023-program/>
3. (2023) Non-Refereed: “Societal Impact at the Core,” **AACSB Insights**: <https://www.aacsb.edu/insights/articles/2022/12/societal-impact-at-the-core>
4. (2022) Gupta, U. G., and Aydogdu, M., *Pedagogical Strategies, Learning Opportunities, and Inherent Challenges in Teaching Visualization*, 53rd Annual Conference of the Decision Sciences Institute, 19-21 November 2022, Houston, TX.
5. (2022) Aydogdu, M., and Gupta, U. G., A Taxonomy of Pedagogical Research in Data Visualization, 53rd Annual Conference of the Decision Sciences Institute, 19-21 November 2022, Houston, TX (Accepted)
6. (2022) Gupta, U.G., “Abstract - The Role of AI Ethical Guidelines in Regulating Human Behavior,” North-East Decision Sciences Institute, April 7-9, 2022, Newark, New Jersey (Refereed) (Did not present due to COVID condition)
7. (2021) Gupta, U., “Abstract - Impact of Digital Badges and Certificates on Analytics Curriculum,” SEDSI, February 16<sup>th</sup>, 2021, Naples, FL. (Did not present in person due to COVID) (Refereed)
8. (2021) Gupta, U., “Framing the Ethics of Artificial Intelligence Within the Larger Scientific Community: Issues, Challenges, and Roadblocks,” Virtual Presentation at the 10<sup>th</sup> International Conference on Ethics in Biology, Engineering, and Medicine, November 14, 2021. (Presented - Non-refereed)
9. (2020) Gupta, U., “Leveraging a Service-learning Approach to Teach a Graduate Course in Data Governance,” **SE Decision Sciences Institute**, Feb 14-16, Charleston, 2020 (Refereed)
10. (2019) Gupta, U., “Strategies for Successful Capstone Projects in Business Analytics Courses. **Decision Sciences Institute**, Data Analytics Session

- (Invited paper) New Orleans, November **2019**
11. Data Economy and Data Monetization: A New Wave of Opportunities and Challenges, **SE-Informs**, Myrtle Beach, October 5-6, **2017** (Refereed)
  12. Achieving Competitive Advantage Through Big Data: Lessons Learned, **NPSMA/SUNY Data Analytics Conference**, May 18, **2016**, Niagara Falls, NY.
  13. Innovation DNA, 11<sup>th</sup> Annual **NY Tech Summit** Conference, Verona, NY, June 4-5, 2015.
  14. Shifting the View from Boring to Daring: How Chief Information Officers Can Become Chief Innovation Officers, **National Business and Economics Society Conference**, Panama City, Panama, March 12-14, 2015.
  15. Talent Shortage Perceptions of IT Executives: A Survey, **27th International Business Research Conference**, Toronto, Canada from 12 – 13 June 2014
  16. Nano-ethics Across Cultures, **Fourth International Conference on Ethical Issues in Biomedical Engineering**, Brooklyn, NY, April 21<sup>st</sup> and 22<sup>nd</sup>, 2007
  17. A College Reorganization Story: A Dean's Perspective; A Faculty Perspective, 2003 **ASEE Conference**, Nashville, TN, 2003.
  18. A Virtual Environment for Collaborative Research and Learning, **2003 ASEE Conference**, Nashville, TN, 2003.
  19. Career Roadmaps in Engineering Technology, **ASEE National Conference**, Nashville, TN, 2003.
  20. Leading Without Bleeding: An Information Case Study at Union Pacific Railroads, **2000 Information Resources Management Association International Conference**, Anchorage, Alaska, May 21-24, 2000 (with Randy Butler and Tom Milner)
  21. Two Decades of Project Management: Lessons Learned, **2000 Information Resources Management Association International Conference**, Anchorage, Alaska, May 21-24, 2000
  22. Why technical wizards sometimes make lousy managers?" **Second Fall Conference on Managing Information Technologies**, Troy, Michigan, October 8-9, 1999.
  23. Validation and Verification of Expert Systems using Knowledge Management Techniques, **International Conference on Validation and Verification**, Sapporo, Japan, September 1998.
  24. Recruiting and Retention of Information Systems Professionals in Nebraska:
  25. Issues and Challenges, **Special Interest Group in Computer Personnel Research** (SIGCPR), October 1997 (co-authored with Echols, M.).
  26. What is MIS? Perspectives of Journal Editors, **ISECON**, Orlando, FL, October 15-17, 1997 (with Cohen, E.).
  27. How successful are we in applying operations research to solve real-world problems? A citation analysis of interfaces (1970-1992), **Proceedings of the Southeast Decision Sciences Institute**, Atlanta, GA, February 27-28, 1997.
  28. Performance measurement systems for agile manufacturing, **Proceedings of the Decision Sciences Institute**, Orlando, FL, November 22-24, 1996 (with Ravi, M.).
  29. Developing Requirement Specifications for Knowledge Acquisition Tools for Case-based Systems, **Proceedings of the Decision Sciences Institute**, Boston,

- MA, November 22-24, 1995 (forthcoming) (with Bradley, J.).
30. An Empirical Investigation of the Contribution of Information Systems to Manufacturing Productivity, *Proceedings of the Association for Information Systems*, Pittsburgh, PA, August 25-27, 1995 (with Capen, M.).
  31. Combining Heuristics and Algorithms for Production Planning, in a Corporate Setting, *Proceedings of the Decision Sciences Institute*, November 20-22, 1994, pp. 680-682 (with MacLeod, K.).
  32. Using Case-based Reasoning Systems to teach Quantitative Model Selection, *Proceedings of the Decision Sciences Institute*, Hawaii, November 20-22, 1994, pp. 366-368 (with MacLeod, K., and Bradley, J.).
  33. RITCAG: Intelligent Test Case Generator for Rule-Based Expert Systems, *Proceedings of the Decision Sciences Institute*, Hawaii, November 22-24, 1994, pp. 738-740.
  34. Case-based Reasoning: A Paradigm for the Enhancement of Quantitative Algorithms, *Proceedings of the Southeast Decision Sciences Institute*, Williamsburg, VA, March 2-4, 1994, pp. 256-258. (Bradley, J.).
  35. Motivating and Measuring Quality Performance in Information Systems Staff: A Case Study, *Proceedings of the Twenty-fifth Silver Anniversary Meeting of the Southeast Region of the Decision Sciences Institute*, February 23-25, 1995, pp. 211-213 (with Crawford, D., Killingsworth, B., and McLeod, M).
  36. Evaluation of a methodology to validate large expert systems, *Proceedings of the 7th. Florida Artificial Intelligence Research Symposium*, Flairs '94, Pensacola, FL, May 5-7, 1994, pp. 96-100 (with Gonzalez, A., and Benafiel, C.).
  37. Case-based Reasoning and the Accounting Domain, *Moving Towards Expert Systems Globally in the Twenty-first Century*, Lisbon, Portugal, January 10-14, 1994, pp. 41-45 (with Brown, C.E.).
  38. Visualization as a Teaching Tool, *1993 Proceedings of the Decision Sciences Institute*, Vol. 1, Washington, D.C., November 21-23, 1993, pp. 287-289.
  39. The Under-Utilization of Information Systems in Manufacturing Environments: Challenges and Remedies, *Proceedings of the Southeast Decision Sciences Institute*, Chattanooga, TN, February 17-19, 1993, pp. 137-139.
  40. A Structured Approach to Verifying and Validating Expert Systems, Wise, J.A., Hopkin, V.D., & Stager, P. (Eds.) *Verification and Validation of Complex and Integrated Human-Machine Systems*, Berlin: Springer-Verlag, 1992, (with McAlindon, P.J.).
  41. Performance Validation of Expert Systems Using Statistical Techniques, *Proceedings of the Decision Sciences Institute Conference*, Miami, FL, November 24-26, 1991, pp. 522-524.
  42. Automatic Test Case Generation for Rule-based Systems, *World Congress on Expert Systems*, Orlando, FL, December 16-19, 1991.
  43. Expert Systems as a Reliability Engineering Tool, *Transactions of the American Society for Quality Control*, Dallas, TX, 1989, pp. 728-734 (with Elshennawy, A.K.M.).
  44. Expert Knowledge Within a Corporation - How to Preserve It, How to

- Disseminate It, *Proceedings of SouthCon*, Orlando, FL, 1988, pp. 108-110 (with Gonzalez, A.).
45. Expert Systems Can Fail, *Proceedings of Summer Simulation Conference*, 1990 (with Biegel, J.E.).
  46. Validation Tools for Expert Systems, *Proceedings of the Third Florida Artificial Intelligence Research Symposium*, Cocoa Beach, FL, April 3-6, 1990, pp. 295-299 (with Biegel, J.E.).
  47. Automating Test Case Generation for Expert Systems, *Proceedings of EDP System and Software Quality Assurance Conference*, Washington, D.C., October 22-25, 1990 (with Biegel, J.E.).
  48. A RITCaG: Rule-Based Intelligent Test Case Generator, *Proceedings of the AAAI Workshop on Knowledge-Based Systems Verification and Validation*, Boston, MA, July 29, 1990 (with Biegel, J.E.).
  49. Validation and Verification of Expert Systems, *Nineteenth Annual National Energy and Environmental Quality Division Conference Proceedings*, Miami, FL, October 1991, pp. 2.1-2.9.
  50. Issues in Expert System Reliability, *Proceedings of the 9th Annual Software Reliability Symposium*, Denver, CO, May 2-3, 1991.

### JOURNAL EDITORIAL REVIEW BOARDS:

Business Education Innovation Journal, American Business Review,  
International Journal of Data Analytics, and Journal of Global Responsibility.

### GRANTS

- (2024) Co-consultant (with Dr. Colby) on a multi-semester grant with Urban League of Upstate to study the impact of **Generative AI** on the emerging talent needs of the global film industry (\$25,000).
- (2023) Served as a consultant to the Center of Business Analytics, University of South Carolina Upstate to develop a dashboard of community indicators in education, economy, and public health for Strategic Spartanburg, a community-focused nonprofit (\$10,000).
- (2023) Served as a consultant to the Center of Business Analytics, University of South Carolina Upstate to develop a visualization dashboard for BMW that assessed global supply-chain risks triggered by severe weather conditions (\$10,000).
- Zillow MSBA Partnership (2022): Successful proposal to Zillow to fund six graduate assistantships for a total amount of \$60,000. Career Services Director Hannah Terpak co-authored the proposal with me.