

# Salvatore T. March

David K. Wilson Professor of Management  
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## Contact Information

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## Education

B.S. (with distinction) Cornell University 1972,  
Major in Industrial Engineering and Operations Research

M.S. Cornell University, 1975, Major in Operations Research

Ph.D. Cornell University 1978, Major in Operations Research  
Minors in Information Processing and Economics

Thesis: *Models of Storage Structures and the Design of Data Records Based Upon a User Characterization*

## Relevant Experience

July 2013 Present Associate Dean of Faculty, Owen Graduate School of Management, Vanderbilt University

July 2000 Present David K. Wilson Professor of Management, Owen Graduate School of Management  
Vanderbilt University.

September 1991 June 2000 Professor, Information and Decision Science Department, University of Minnesota  
(Management Information Systems); Area PhD Coordinator 1995 - 2000.

September 1984 August 1991 Associate Professor, Information and Decision Science Department, University of Minnesota  
(Management Information Systems).

June 1979 June 1984 Assistant Professor, Management Sciences Department, University of Minnesota  
(Management Information Systems).

September 1977 June 1979 Assistant Professor, Department of Management Science, University of Rhode Island  
(Management Information Systems, Computer Applications for Management).

## Professional Activities

Editorships:

*ACM Computing Surveys*  
1983 - 1986 Associate Editor  
1986 - 1992 Editor-in-Chief

*MIS Quarterly*  
1993 - 1998 Associate Editor

*Decision Science Journal*

1995 - 2006 Associate Editor  
*Information Systems Frontiers*  
1998 - present Editorial Board  
*Information Systems Research*  
1999 - 2000 Associate Editor  
2000 - 2004 Senior Editor  
2004 - 2005 Senior Editor Emeritus  
*Journal of Database Management*  
2000 - present Associate Editor  
*Information Technology and Management*  
2000 - present Associate Editor  
*Information Systems and e-Business Management*  
2001 - present Editorial Board Member  
*International Journal of Intelligent Systems in Accounting*  
2002 - present Member of the Editorial Board  
*Communications of the AIS*  
2003 - 2011 Area Editor - Design Science Research  
*International Journal of Intelligent Information Technologies*  
2004 - present Editorial Board Member  
*Advances in Database Research Series*  
2006 - present Member of the Editorial Advisory Board  
*ACM Transactions on Management Information Systems*  
2011 - 2014 Editorial Board Member  
*Data & Knowledge Engineering*  
2013 - present Editorial Board Member

#### Guest Editor

Special Issue of *Information Technology Management Journal* on Information Systems to Support Business (1999).  
Special Issue of *Data & Knowledge Engineering* with Stefano Spaccapietra ER 2002 (July 2005).  
Special Issue of *Journal of the Association for Information Systems* on Cultivating and Securing the Information Supply Chain, April 2008 (with Raghuram Santanam and Ajay Vinze)  
Special Issue of *MIS Quarterly* on Design Science Research, December 2008 (with Veda Storey)

#### Conference Organization:

##### Program Committee Chair:

6th International Conference on Entity-Relationship Approach, New York, November 9-11, 1987  
7th Workshop on Information Technologies and Systems December, 1998.

Program Committee Co-Vice Chair for Research in Progress Track, 20th International Conference on Information Systems, December 1999.

##### Conference Co-Chair:

7th International Conference on Entity-Relationship Approach, Rome, Italy, November 16-18, 1988  
21st International Conference on Conceptual Modeling, Tampere, Finland, October 7-11, 2002

##### Steering Committee Member:

International Conference on Entity-Relationship Approach (1989-91, 1993-95), Treasurer 1993-95.  
International Conference on Conceptual Modeling (formally Entity-Relationship Approach) (2001- 2003)

##### Steering Committee Member:

Workshop on Information Technologies and Systems (1995-2000)

Program Executive Committee Member and Research-in-Progress Track Co-Chair, International Conference on Information Systems, Charlotte NC, December 12-15, 1999.

Steering Committee President, Workshop on Information Technologies and Systems (2001 - 2003)

Advisory Board Member, Conference on Information Systems and Technology (2001)

Advisory Board Member, Teradata University (2002 - 2004)

Program Committee Co-Chair, International Conference on Information Systems, Seattle, WA, December 14-17, 2003

Executive Committee Member, International Conference on Information Systems (2003 - 2004)

Steering Committee Member, Workshop on Information Technologies and Systems (2004 - 2006; 2009-2012)

Design Science Research Track Co-Chair, International Conference on Information Systems, Montreal, Canada, 2007  
Program Committee Co-Chair, International Conference on Information Systems, St. Louis, MO, 2010.

Reviewer for:

*MIS Quarterly, Information Systems Journal, Data & Knowledge Engineering, Journal of MIS, Data Base, Decision Sciences Journal, IEEE Transactions on Knowledge and Data Engineering, Management Science, Information Systems Research, ACM Transactions on Management Information Systems, European Journal of Information Systems*, National Science Foundation Division of Mathematical and Computer Sciences; Decisions, Risk, and Management Science Program

Invited Conference Presentations:

Ontology in the Design of IT Artifacts, Keynote Address, Third International Conference on Design Science Research, Atlanta GA, May 8-9, 2008.

Srinivasan, A., March, S. T., and Saunders, C. Information Technology and Organizational Contexts: Orienting Our Work along Key Dimensions, *International Conference on Information Systems*, Las Vegas, NV, December 12-14, 2005, Association for Information Systems, pp. 991-1001.

Reflections on Computer Science and Information Systems Research, Keynote address, *19<sup>th</sup> International Conference on Conceptual Modeling*, Salt Lake City, October 9-12, 2000.

Challenges in Net-Centric Systems, *Third Fall Conference on Managing Information Technologies*, Troy, MI, October 13-14, 2000.

Developing Internet Agents: A Tutorial Using Visual Basic 6.0, (with Gove N. Allen, University of Minnesota), *Twenty-First International Conference on Information Systems*, Brisbane, Australia, December 10-13, 2000.

International Experience:

Instructor, Information System Development, Escuela de Administracion de Negocios para Graduados (ESAN), Lima Peru, August 3-8, 1999.

Visiting Professor, Seoul National University Global MBA Program (2007, 2008).

Consulting Experience:

Office of Naval Research, New England Marine Services Industry, Mattefy Engineering and Associates, Insulation Materials Corporation, Sperry Corporation, National Bureau of Standards, Minnesota State University System, Pillsbury, United HealthCare Corporation, Aim Marketing, CompuServe Corporation, Graviton, Inc., Asurion, Inc.

**Academic Honors**

Smeal Visiting Scholar, Pennsylvania State University, June 2003.

Design Science Lifetime Achievement Award, *International Conference on Design Science Research in Information Systems and Technology*, May 2008

**Teaching Interests**

Accounting Information Systems, Business Forecasting, Business Intelligence and Data Mining, Database Management, Decision Sciences, Electronic Commerce, Game Theory, Information Systems Development, Managerial Economics, Managerial Statistics

**Professional and Academic Organizations**

Member of Association for Information Systems

Member of Decision Science Institute

## Research Interests

Distributed System Design, Conceptual Modeling, Ontology, Genetic Algorithms, Information System Development

## Journal Special Issues: Guest Editor Introductions

March, S. T. & Storey, V. C. (2008) Design Science Research in the Information Systems Discipline: An Introduction to the Special issue on Design Science Research. *MIS Quarterly* (32:4), 725-730.

March, S. T., Raghu, T. S., & Vinze, A. (2008) Editorial Introduction: Cultivating and Securing the Information Supply Chain. *Journal of the AIS*, (9:4) article 12.

## Refereed Journal Articles

March, S. T. and Severance, D. G. "The Determination of Efficient Record Segmentations and Blocking Factors for Large Shared Databases," *ACM Transactions on Database Systems*, Vol. 2, No. 3, September 1977.

March, S. T., Severance, D. G., and Wilens, M. "Frame Memory: A Storage Architecture to Support Rapid Design and Implementation of Efficient Databases," *ACM Transactions on Database Systems*, Vol. 6, No. 3, September 1981.

Carlis, J. V., March S. T., and Dickson, G. W., "Physical Database Design: A DSS Approach," *Information and Management*, Vol. 6, No 4, August, 1983.

March, S. T. and Carlis, J. V., "An Overview of Physical Database Design Research at the University of Minnesota," *IEEE Database Engineering Newsletter*, IEEE Computer Society, Vol. 5, No. 1, March 1982.

March, S. T., "Techniques for Structuring Database Records," *ACM Computing Surveys*, Vol. 15, No. 1, March, 1983.

March, S. T., "A Mathematical Programming Approach to the Selection of Access paths for Large Multiuser Databases", *Decision Science*, (14, 4), Fall 1983, pp. 564-587.

Carlis, J. V. and March, S. T., "A Computer Aided Physical Database Design Methodology," *Computer Performance*, (4, 4), December 1983, pp. 198-214.

March, S. T. and Scudder, G. D., "On Optimizing Field Repair Kits Based on Job Completion Rate," *Management Science*, Vol. 30, No. 3, August 1984, pp. 1025-1028.

March, S. T. and Scudder G. D., "On the Selection of Efficient Record Segmentations and Backup Strategies for Large Shared Databases," *ACM Transactions on Database Systems*, Vol. 9, No. 3, September 1984, pp. 409-438.

Palvia, P. and March, S. T., "Approximating Block Accessing in Database Organizations," *Information Processing Letters*, 19 (1984), pp. 75-79.

March, S. T. and Carlis, J. V., "On the Interdependencies of Record Structure and Access Path Design," *Journal of Management information Systems*, Vol 4, No 2, Fall 1987.

O'Donnell, D. J. and March, S. T., "End User Computing Environments: Finding a Balance Between Productivity and Control," *Information and Management*, (13) 1987.

March, S. T. and Kim, Y. G., "Information Resource Management: A Metadata Perspective," *Journal of Management Information Systems*, Vol 5, No 3, Winter 1988-89, pp 5-18.

- Ketabchi, M. A., Berzins, V., and March, S. T., "An Object Oriented Semantic Data Model for CAD Applications," *Information Science*, Vol 46, (1988), pp 109-139.
- Brancheau, J. C., March, S. T., and Schuster, L., "Building and Implementing an Information Architecture," *Data Base*, Vol. 20, No. 2, Summer 1989.
- Boulanger, D. and March, S. T., "An Approach to Analyzing the Information Content of Existing Databases," *Data Base*, Vol. 20, No. 2, Summer 1989.
- Dabrowski, C. E., Jefferson, D. K., Carlis, J. V., and March, S. T., "Integrating a Knowledge-Based Component into a Physical Database Design System," *Information and Management*, Vol 17 (1989).
- Everest, G. C., March, S. T., Hanna, M. S., and Sastry, M. N., "An Analysis of the Data Representation Constructs of the ANSI NDL and SQL Standards," *Computer Standards and Interfaces*, December 1989.
- Prietula, M. J. and March, S. T., "Form and Substance in Physical Database Design: An Empirical Study," *Information Systems Research*, December 1991.
- Hill, A. V., March, S. T., Nachtsheim, C. J., and Shanker, M. S., "An Approximate Model for Field Service Territory Planning," *IIE Transactions*, Vol. 24, No. 1, March 1992.
- March, S. T. and Kim, Y.-G., "Information Resource Management: Integrating the Pieces," *Data Base*, Vol 23, No 3, Summer 1992.
- Kim, Y-G. and March, S. T., "Comparing Data Modeling Formalisms," *Communications of the ACM*, Vol 38, No 6, June 1995.
- March, S. T. and Rho, S., "Allocating Data and Operations to Nodes in Distributed Database Design," *IEEE Transactions on Knowledge and Data Engineering*, vol 7, no 2, April 1995, pp 305-317.
- March, S. T. and Smith, G. F., "Design and Natural Science Research on Information Technology," *Decision Support Systems*, vol 15, no 4 (1995), pp 251-266.
- Leitheiser, R. L. and March, S. T., "The Influence of Database Structure Representation on Database System Learning and Use," *Journal of Management Information Systems*, Vol 12, No. 4, Spring, 1996, pp 187-213.
- Rho, S. and March, S. T., "Characterization and Analysis of a Nested Genetic Algorithm for Distributed Database Design," *Seoul Journal of Business*, Vol. 2, No. 1, Fall 1996, pp. 86-121.
- Rho, S. and March, S. T., "An Analysis of Semantic Overload in Database Access Systems Using Mult-Table Query Formulation," *Journal of Database Management*, Vol. 8, No. 2, Spring 1997, pp. 3-14.
- Rho, S. and March, S. T., "Optimizing Join Queries: A Genetic Algorithm Approach," *Annals of Operations Research*, Vol. 71 (1997), pp. 199-228.
- Rho, S. and March S. T., "Object-Oriented Development: Patterns, Interfaces, and Update Semantics," *Seoul Journal of Business*, Vol. 3, No. 1, Fall 1997, pp. 37-63.
- March, S. T., Wood, C. A., and Allen, G. A., "Research Frontiers in Object Technology," *Information Systems Frontiers*, Vol. 1, No. 1, 1999.
- Chandra, J., Gasser, L., March, S., Mukherjee, S., Pape, W., Ramesh, R., Rao, H., and Waddoups, R., "Information Systems Frontiers," *Communications of the ACM*, Vol. 43, No. 1, January, 2000, pp. 71-79.

- March, S. T. and Rho, S., "A Semantic Object-Oriented Data Access System," *Information Systems*, Vol. 25, No. 1, January 2000, pp. 23-41.
- Goodhue, D. L., Klein, B. D., and March, S. T., "Are User Evaluations of IS a Poor Surrogate For Objective Performance?" *Information and Management*, Vol. 38, No. 2, pp. 87-101 (2000).
- Kauffman, R. J., March, S. T., and Wood, C. A., "Design Principles For Long-Lived Internet Agents," *International Journal of Intelligent Systems in Accounting, Finance and Management*, Vol. 9, No. 4, December 2000.
- March, S. T., Hevner, A., and Ram, S., " Research Commentary: An Agenda for Information Technology Research in Heterogeneous and Distributed Environments," *Information Systems Research*, Vol. 11, No. 4, December 2000, pp. 327-341.
- Rho, S. and March S. T., "A Decision Support Tool for Distributed Database Design," *Seoul Journal of Business*, Vol. 6, No. 1/2, December 2000, pp. 71-111.
- Allen, G. N. and March, S. T., "Modeling Temporal Dynamics for Business Systems," *Journal of Database Management*, 14(3), July-Sept 2003, pp 21-36.
- Johansson, J.M., March, S.T., and Naumann, J.D. "Modeling Network Latency and Parallel Processing in Distributed Database Design," *Decision Sciences Journal* (34:4) Fall 2003, pp. 677-706.
- Hevner, A. R. and March, S. T., "The Information Systems Research Cycle," *IEEE Computer*, November 2003, pp 109-111.
- Hevner, A., March, S. T., Park, J. and Ram, S. "Design Science Research in Information Systems," *MIS Quarterly* (28:1) March 2004, pp. 75-105. Republished in L. Willcocks & A. S. Lee (Eds.), Major Currents in Information Systems, K. Lyytinen, G. Rose & R. Welke (Eds.), Volume 3: Design Science Theories and Research Practices, London: Sage Publishers.
- March, S. T., "A Practical Approach to Teaching eBusiness Concepts," *International Journal of Information Technology Education*, (1:1) 2004, pp. 109-128.
- Galbreth, M. R., March, S. T., Scudder, G. S., and Shor, M. "A Game Theoretic Model of E-Marketplace Participation Growth," *Journal of Management Information Systems*, (22:1) Summer 2005, pp 295-319.
- Allen, G. N. and March, S. T., "The Effect of State-Based and Event-Based Data Representation on User Performance in Query Formulation Tasks," *MIS Quarterly* (30:2), June 2006, pp. 269-290.
- March, S. T. and Allen, G. N., "Ontological Foundations for Active Information Systems," *International Journal of Intelligent Information Technologies*, (3:1), January-March 2007, pp. 1-13.
- March, S. T. and Hevner, A. R., "Integrated Decision Support Systems: A Data Warehousing Perspective," *Decision Support Systems*, (43:3), April 2007, pp. 1031-1043.
- Dai, Q., Kauffman, R. J., & March, S. T. "Growth Option Valuation of Information Technology Infrastructure," *Information Technology and Management*, (8:1), March 2007, pp. 1-17.
- Allen, G. N. & March, S. T. (2012) A Research Note on Representing Part-Whole Relations in Conceptual Modeling. *MIS Quarterly* (36:3), September 2012, pp. 945-964.
- March, S. T. and Niederman, F. (2012) "The Future of the Information Systems Discipline: A Response to Walsham," *Journal of Information Technology* (27) pp. 96-99.

- Niederman, F. and March, S. T. (2012) "Design Science and the Accumulation of Knowledge in the Information Systems Discipline," *ACM Transactions on Management Information Systems*, (3:1), April 2012, pp. 1-15.
- Narock, T., Yoon, V and March S. (2012) "On the Role of Context and Subjectivity on Scientific Information Systems," *Communications of the Association for Information Systems*, (30) Article 12.
- Niederman, F. and March, S. T. (forthcoming) "Moving the Work System Theory Forward," *Journal of the Association for Information Systems*.
- March, S. T. and Allen, G. (forthcoming) "Toward a Social Ontology for Conceptual Modeling," *Communications of the AIS*.
- Narock, T., Yoon, V. and March, S. T., (forthcoming) "A Provenance-Based Approach to Semantic Web Service Description and Discovery," *Decision Support Systems*.

### **Refereed Proceedings Articles**

- March, S. T. and Severance, D. G. "A Mathematical Modeling Approach to the Automatic Selection of Database Designs," *Proceedings ACM SIGMOD International Conference on Management of Data*, May 1978.
- Carlis, J. V., March S. T., and Dickson, G. W., "Physical Database Design: A DSS Approach," *Proceedings of the Second International Conference on Information Systems*, Cambridge, MA, December 7-9, 1981.
- Hill, A. V. and March, S. T., "FAST-TECH: A Decision Support System for Field Service Planning," *Proceedings 1983 National AIDS Conference*, San Antonio, TX, November, 1983.
- March, S. T., Ridjanovic, D. and Prietula, M., "On the Effects of Normalization on the Quality of Relational Database Designs or Being Normal is Not Enough," *Proceedings 1984 Trends and Applications Conference*, Gaithersberg, MD, May 23-24, 1984.
- Carlis, J. V. and March, S. T., "A Descriptive Model of Physical Database Design Problems and Solutions," *Proceedings International Conference on Data Engineering*, IEEE, April 24-27, 1984, Los Angeles, CA.
- Flory, A., March, S.T., and Ridjanovic, D., "A Framework for the Development of the Information Resource", *Proceedings 1985 International Computing Symposium*, ACM, Florence, Italy, March 27-29, 1985.
- Ketabchi, M. A., Berzins, V., and March, S. T., "ODM: An Object Oriented Data Model for Design Databases," *Proceedings ACM 14th Computer Science Conference*, Cincinnati, Ohio, Feb 4-6, 1986.
- Flory, A. and March, S. T., "SCRABBLE: A Local Database Management System," *Proceeding 5th International Conference on Entity-Relationship Approach*, Dijon France, November 1986.
- Kim, Y-G. and March, S. T., "Empirical Studies in Conceptual Data Modeling: Establishing a Research Tradition," *25th Hawaii International Conference on System Sciences*, January 1992.
- Rho, S. and March, S. T., "A Nested Genetic Algorithm for Distributed Database Design," *27th Hawaii International Conference on System Sciences*, January 1994.
- Rho, S. and March, S.T., "Designing Distributed Database Systems for Efficient Operation," *Proceedings of the Sixteenth International Conference on Information Systems*, December 10-13, 1995, Amsterdam, The Netherlands, pp. 237-253. Translated into Dutch and published as, "Het ontwerpen van efficiënte gedistribueerde databases," in *Informatie*, Jaargang 37, November 1995.

- March, S. T., and Rho, S., "Object Support for Entity-Relationship Semantics," *Proceedings of the Workshop on Information Technology Systems*, Cleveland, OH, December 14-15, 1996.
- Dai, Q., Kauffman, R. J., and March, S. T., "Analyzing Investments In Object-Oriented Middleware," *Proceedings of the Workshop on Information Technology Systems*, Charlotte, December 11-12, 1999 (Best Paper Award).
- Kauffman, R. J., March, S. T., and Wood, C. A., "Agent Sophistication: Design Aspects For Data-Collecting Agents" *Proceedings of the Workshop on Information Technology Systems*, Charlotte, December 11-12, 1999.
- Johansson, J. M., March, S. T., and Naumann, J. D., "The Effects of Parallel Processing on Update Response Time in Distributed Database Design," *Proceedings of the Twenty-First International Conference on Information Systems*, Brisbane, Australia, December 10-13, 2000, pp. 187-196.
- Allen, G. N. and March, S. T., "The Effect of Data Representation on User Self-Efficacy in Query Formulation Tasks," *Symposium on Research in Systems Analysis and Design*, Miami, Florida, April 5-6, 2003.
- Galbreth, M. R., March, S. T., and Scudder, G. D., "An Economic Perspective on E-Procurement Investments," *ISOneWorld Conference and Convention*, Las Vegas, Nevada, USA, April 23-25, 2003.
- March, S. T. and Hevner, A. R., "Integrated Decision Support: A Data Warehousing Perspective," AIS SIGDSS Pre-ICIS Workshop Research Directions on Decision Support, December 14, 2003.
- Allen, G. N. and March, S. T., "The Ontological Treatment of the "Event" Construct: Implications for System Analysis and Design," *Proceedings of the Fifth Annual Symposium on Research in Systems Analysis and Design*, Vancouver, BC, May 13-14, 2006, pp. 3-9.
- Allen, G. N. and March, S. T., "A Critical Assessment of the Bunge-Wand-Weber Ontology for Conceptual Modeling," *Proceedings of the Sixteenth Annual Workshop on Information Technologies and Systems*, December 9-10, 2006, Milwaukee WI, pp. 25-30.
- Allen, G. N. and March, S. T., "The Proper Role of Optionality and Negation in Conceptual Modeling," *Proceedings of the Eighth Annual Symposium on Research in Systems Analysis and Design*, Richmond, VA, May 21-23, 2009 Richmond, Virginia
- March, S. T. and Allen, G. N., "A Test of the Cognitive Effects of Ontological Construct Overload," *Proceedings of the Ninth Annual Symposium on Research in Systems Analysis and Design*, St. Johns, Newfoundland, May 29-30, 2010.
- March, S. T. and Allen, G. N., "Toward a Social Ontology for Conceptual Modeling," *Proceedings of the Eleventh Annual Symposium on Research in Systems Analysis and Design*, Vancouver, Canada, June 1-2, 2012.
- Allen, G. N. and March, S. T., "Haves and have nots: an ontological examination of negative classification," *Proceedings of the Eleventh Annual Symposium on Research in Systems Analysis and Design*, St. Louis, MO, May 30-31, 2014.
- Niederman, F. March, S. and Mueller, B. "Accumulating Project Management Knowledge through Process Theory," Project Management Institute 2014 Research & Education Conference, Portland OR, July 27-29, 2014.

### **Invited Papers**

- March, S. T., "Research Issues in Information Technology," Keynote Address, *Proceedings of the 2nd Workshop on Information Technology Systems*, Dallas, TX, Dec. 12-13, 1992.
- March, S. T. and Carlis, J. V., "Physical Database Design: Obtaining Efficient Operations," Invited Paper, *Proceedings of the 11th Annual Conference of the Association of Management*, Atlanta, GA, August 5-9, 1993.

- March, S. T., "Reflections on Computer Science and Information Systems Research," in Laender, A. H., S. W. Liddle, V. C. Storey (Eds.), *Conceptual Modeling -- ER 2000, Lecture Notes in Computer Science 1920*, Springer, Berlin, 2000, pp. 16-25.
- March, S. T. and Hevner, A. R., "Integrated Decision Support: A Data Warehousing Perspective," AIS SIGDSS Pre-ICIS Workshop Research Directions on Decision Support, December 14, 2003.
- March, S. T., " Research Note: Extending the Boundaries," *SIGABIS Exchange* (3:1), Association for Information Systems April 2005, pp 3-4.
- March, S. T. and Allen, G. N., "The Event Construct in Active Information Systems," *Active Conceptual Modeling of Learning Workshop, SSC San Diego, May 10-12, 2006*.
- March, S. T. and Allen, G. N., "Challenges in Requirements Engineering: A Research Agenda for Conceptual Modeling," *NSF Science of Design – Design Requirements Workshop*, Cleveland, OH, USA – June 3 - 6, 2007.

### Book Chapters

- March, S. T. and Carlis, J. V., "Physical Database Design: Techniques for Improved Database Performance," in Kim, W., Reiner, D. and Batory, D. (Eds.), *Query Processing in Database Systems*, Springer-Verlag, 1985.
- March, S. T., "Logical Data Modeling," *Macmillan Encyclopedia of Computers*, 1992.
- Articles in *Blackwell Encyclopedic Dictionary of MIS* and *Encyclopedia of Management*, 1995-96: "SQL," "Logical Data Modeling," "Physical Data Modeling," and "Object-Oriented Programs and Systems."
- March, S. T., "Data Modeling - Entity-Relationship Data Model," *Encyclopedia of Information Systems (Volume 1)*, Academic Press, Elsevier Science, Amsterdam, 2003, pp 489-503.
- March, S. T. and Allen, G. N. "On the Representation of Temporal Dynamics," in Siau, K. (Ed.) *Advances in Database Management*, Idea Group Publishing, 2003, pp 37-53.
- March, S. T., "Designing Design Science," Chapter 18 in John L. King and Kalle Lyytinen (eds.) *Information Systems: The State of the Field*, John Wiley & Sons, Ltd, 2006, pp. 338-344.
- March, S. T. & Allen, G. N. (2008). Conceptual Modeling of Events for Active Information Systems. In V. Sugumaran (Ed.), Distributed Artificial Intelligence, Agent Technology, and Collaborative Applications (pp. 261-289). Hershey, NY: Information Science Reference.
- March, S. T. & Allen, G. N. (2009). Challenges in Requirements Engineering: An Ontology of the Artificial for Conceptual Modeling, In Lyytinen, K.J.; Loucopoulos, P.; Mylopoulos, J.; Robinson, W. (Eds.), Design Requirements Engineering: A Ten-Year Perspective, Berlin: Springer (pp. 157-165).
- March, S. T. & Vogus, T. J. (2010) Design Science in the Management Disciplines In A. Hevner & S. Chatterjee (Eds.), DESIGN SCIENCE: A Research Paradigm for Information Systems, New York: Springer.

### Books

- March, S. T., (ed.) *Entity-Relationship Approach*, Proceeding of the Sixth International Conference on Entity-Relationship Approach, North Holland Publishing, Amsterdam, 1988.

Spaccapietra, S., March, S. T., and Kambayashi, Y. (Eds.) *Conceptual Modeling - ER 2002*, Proceedings of the 21st International Conference on Conceptual Modeling, Lecture Notes in Computer Science 2503, Springer, Berlin, 2002.

### **Editor Reviewed Monographs**

Carlis, J. V. and March, S. T. "A Computer Aided Database Design Methodology," Auerbach Data/Base Management, *Design and Development*, Number 23-01-11, Auerbach Publishers, Inc., New York, September 1981. (Reprint of Technical Report MISRC-TR-81-01, University of Minnesota, July 1980).

Carlis, J. V. and March, S. T., "Alternative Data Base Schema Design," in *Design and Development, Data Base Management*, Auerbach Publishers, Inc., Report 23-01-04, November/December, 1983.

Carlis, J. V. and March, S. T., "Efficient File Organization Design," in *Design and Development, Data Base Management*, Auerbach Publishing, Inc., Report 23-01-05, November/December, 1983.

March, S.T., Carlis, J.V., and Flory, A., "On the Effective Use of Fourth Generation Languages: A Managers Guide to Relational Database Design and Use," *Information Center Resource, End User Computing*, Auerbach Publishers, Inc., New York, April 1986.

Kahn, B. and March, S. T. (track co-chairs), "IRM and the Systems Life Cycle", *Database Directions: IRM - Making It Work*, National Bureau of Standards, Report #500-139, republished in *Bulletin of the IEEE Computer Society Technical Committee on Database Engineering*, June, 1986.

### **Electronic Journals**

Blake Ives, Joe Valacich, Richard T. Watson, Robert Zmud, Maryam Alavi, Richard Baskerville, Jack J Baroudi, Cynthia Beath, Thomas Clark, Eric K. Clemons, Gordon B. Davis, Fred Davis, Alan R. Dennis, Omar A. El Sawy, Jane Fedorowicz, Robert D. Galliers, Joey George, Michael Ginzberg, Paul Gray, Rudy Hirschheim, Sirkka Jarvenpaa, Len Jessup, Chris F. Kemerer, John L. King, Benn Konsynski, Ken Kraemer, Jerry N. Luftman, Salvatore T. March, M. Lynne Markus, Richard O. Mason, F. Warren McFarlan, Ephraim R. McLean, Lorne Olfman, Margrethe H. Olson, John Rockart, V. Sambamurthy, Peter Todd, Michael Vitale, Ron Weber, Andrew B. Whinston, "What Every Business Student Needs to Know About Information Systems," *Communications of the Association for Information Systems*, Volume 9, 2002, pp. 467-477.