

# JAMES VORBACH

Director and Associate Professor  
Division of Library and Information Science  
St. John's University  
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## EDUCATION

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**Ph.D., Applied Mathematical Sciences**, University of Rhode Island, Kingston, RI, 1990  
DISSERTATION: *A Unifying Logic-based Formalism for Semantic Data Models*

**M.S., Computer Science**, University of Rhode Island, Kingston, RI, 1982  
THESIS: *Dorvac: an Interactive View Mechanism for the Casual User*

**B.S., Electrical Engineering**, SUNY at Stony Brook, Stony Brook, NY, 1978

## RESEARCH INTERESTS

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- Conceptual Modeling
- Database Design
- Metadata
- Online Learning Pedagogy

## EXPERIENCE

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Director, Division of Library and Information Science, St. John's University, 2014 - .

Associate Professor, Division of Library and Information Science, St John's University, 2004 - .

Database Consultant, 1999 – 2009

- Design and implementation of database applications to support data filtering, migration, validation, performance evaluation, marketing, and client reporting
- Client: Deutsche Asset Management, Deutsche Bank, NY, NY

Associate Professor, Department of Mathematics and Computer Science, St John's University, 1996 - 2004.

Assistant Professor, Department of Mathematics and Computer Science, St John's University, 1989 - 1996.

Adjunct Instructor, University of Rhode Island, Department of Computer Science & Statistics, 1985 - 1989

Instructor, Providence College, Department of Mathematics and Computer Science, 1982 - 1985

## TEACHING

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Division of Library and Information Science, St. John's University, 2004 - .

- Database Modeling and Design
- Web Design for Libraries and Information Centers
- Metadata for Information Professionals
- Research and Evaluation Methods

Department of Mathematics and Computer Science, St. John's University, 1989 – 2004.

- Data Structures
- Compiler Design
- Programming Languages
- Computer Science 1 and 2

Department of Computer Science and Statistics, University of Rhode Island, 1985 - 1989

- Compiler Design
- Database Design

Department of Mathematics and Computer Science, Providence College, 1982 - 1985

- Data Structures
- Database Design
- Computer Science 1 and 2

## **PUBLICATIONS**

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Singh, R., & Vorbach, J. (2017). Re-envisioning management education and training for information professionals. *Journal for Education in Library and Information Science*, 58(2), 94-105.

Vorbach, J. (1999). A database project methodology for real design experiences, *Proc. of the 15th Annual Eastern Small College Computing Conference, St. Bonaventure, NY, Oct. 15-16, 1999*, 155-160.

Brawner, J. and Vorbach J. (1998). An algorithmic logic approach to formalizing database update semantics, *J. of Applied Non-Classical Logics*, 8(3), 199-220.

Vorbach, J. (1997). A design-oriented database course, *Proc. of the 13<sup>th</sup> Annual Eastern Small College Computing Conference, October 24-25, 1997, The Richard Stockton College of New Jersey, Pomona, NJ*.

Brawner, J., MacKellar, B., Peckham, J. and Vorbach, J. (1997). Automatic generation of update rules to enforce consistency constraints in design databases, *Proc. 7th IFIP 2.6 Working Conf. on Database Semantics (DS-7), October 7-10, 1997, Leyson, Switz*.

Peckham, J., MacKellar, B. and Vorbach, J. (1997). A Unified Approach to the Design and Generation of Complex Database Schemata, *J. of Database Management*, 8(3), 16-25.

Ochs, R., Qureschi, A., Sycz, A. and Vorbach, J. (1996). A computerized metabolic map II - relational structure, extended modeling and a graphical interface, *J. Chemical Information and Computer Sciences*, 36(3) 594-601.

Vorbach J. and Ryan, J. (1995). Information technology model for evaluating emergency medicine teaching, *Healthcare Information Infrastructure, SPIE Proceedings Series*, v.2618, 63-71.

Brawner, J. and Vorbach, J. (1995). A formal basis for schema analysis of semantic database update semantics, *Proc. of the 23rd Annual ACM Computer Science Conference, February 28 - March 2, 1995, Nashville, TN*, 142-149.

Chudziak, J., Rybinski, H. and Vorbach, J. (1995). On unification of formalisms for semantic data models, *Proc. Intelligent Information Management Systems Conf. (IASTED/ISMM), June 7-9, 1995, Washington, D. C*.

Chudziak, J. and Vorbach, J. (1994). SDM-CASE - a Verification and Validation Tool for Semantic Database Schemata, *Proc. of the 25th Annual Meeting Decision Sciences Institute (DSI'94), November 20 - 22, 1994, Honolulu, Hawaii*, 952 - 955.

Vorbach, J. (1994). The Medical Center 'Med' Information System Project, *Proc. of the 25th Annual Meeting Decision Sciences Institute (DSI'94), November 20 - 22, 1994, Honolulu, Hawaii*, 870 - 873.

Chudziak, J., Rybinski, H. and Vorbach, J. (1994). Towards a unifying logic formalism for semantic data models, in *The 12th Int'l Conf. on the Entity-Relationship Approach, Lecture Notes in Computer Science Series v. 823*, New York : Springer-Verlag, 492-507.

Vorbach, J. (1992). SDM-Logic - An approach for analyzing semantic data models, *Bulletin of the Polish Academy of Science*, 40(1), 85-98.

Vorbach, J. and Kowalski, J. (1991). A unifying logic-based formalism for semantic data models, *Proc. of the 19th Annual Computer Science Conf. (CSC '91), March 5-7, 1991, San Antonio, Texas*, 343-349.

## PRESENTATIONS

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Singh, R., & Vorbach, J. (2017). *Re-envisioning management education and training for information professionals*, Association for Information Science and Technology Webinar, April 5, 2017.

Singh, R., & Vorbach, J. (2017). *Partnering with the LIS community to design curriculum for development of management skills in information professionals*. Association for Library and Information Science Education Annual Conference on Community Engagement & Social Responsibility, Jan 17-20, 2017, Atlanta, GA. Juried Paper Presentation.

Vorbach, J. (2016). *Emerging Technologies for Emerging Librarians*, Nassau County Library Association, Port Washington Public Library, Port Washington, NY, November 30, 2016. Invited panelist.

Vorbach, J. (2015). *March assessment madness: Assessment ideas from St. John's College of Arts and Sciences*, St. John's University, March 12, 2015. Invited panelist.

Vorbach, J. (2015). *Small Steps To Big Data*, Special Libraries Association of New York's Annual Conference, September 25, 2015. Invited panelist.

Vorbach, J. (2014). *Turn-it-in: A non-user's questions*, St. John's University, October 4, 2014. Invited panelist.

Vorbach, J. (2006). *Database development: Managing the process*, Archivists of Religious Institutions Annual Meeting, Bronx, NY, May 17, 2006. Keynote presentation.

Vorbach, J. (1995). *Can we write correct programs?* Greater Metropolitan New York Math Fair, Pace University, NY, April 2, 1995. Keynote presentation.

Vorbach, J. (1993). *A formal approach towards Semantic Data Models using a two-level logic*, Department of Computer Science and Statistics, University of Rhode Island, Nov. 1, 1993. Invited presentation.

Vorbach, J. (1993). *A formal approach towards Semantic Data Models using a two-level logic*, Department of Computer and Systems Sciences, Stockholm University, Sweden, Aug. 13, 1993. Invited presentation.

Vorbach, J. (1993). *A formal approach towards Semantic Data Models using a two-level logic*, The Franco - Polish School of New Information Technologies, Poznan, Poland, June 24, 1993. Invited presentation.

Vorbach, J. (1993). *Semantic Data Models and a logic approach to their generalization*, Department of Computer Science, Warsaw University of Technology, Poland, March 25, 1993. Invited presentation.

Vorbach, J. (1991). *Semantic Database Models and database logic*, Institute for Scientific, Technical, and Economic Information, Warsaw, Poland, July 5, 1991. Invited presentation.

Vorbach, J. (1991). *Information Modeling and Relational Databases*, Donnelley Marketing, Stamford, CT, March, 25, 1991. Invited presentation.

Stanton, R. and Vorbach, J. (1990). *Using TrueBASIC*, The 3rd Int'l. Conf. on Technology in Collegiate Mathematics, Columbus, Ohio, Nov. 9, 1990. Workshop presentation.

## **GRANTS**

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Vorbach, J. (2016). Nassau County Library Association Archive Project, Nassau County Library Association (\$21,000), 2016 – 2017, Role: Principal Investigator.

Vorbach, J. (1999). Information Systems for Docket Tracking in Educational Institutions III, Lemelson National Program, NCIIA initiative (\$3,599), 1999 - 2000, Role: Principal Investigator.

Vorbach, J. (1998). Information Systems for Docket Tracking in Educational Institutions II, Lemelson National Program, NCIIA initiative, (\$7,280), 1998 - 1999, Role: Principal Investigator.

Vorbach, J. (1997). Information Systems for Docket Tracking in Educational Institutions, Lemelson National Program, NCIIA initiative, (\$14,095), 1997 – 1998, Role: Principal Investigator.

## **HONORS**

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- Fulbright Scholar, Poland, Warsaw University of Technology, Institute of Computer Science, 1992 - 1993
- Research Fellowship, Sweden, Stockholm University, Dept of Computer Science, 1993
- Research Scientist, Poland, Warsaw, Institute for Scientific, Technical, & Economic Information, 1991

## **MEMBERSHIPS**

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- American Library Association
- Association for Library and Information Science Education
- Nassau County Library Association