

# Michael Bieber

## Curriculum Vita

November 2010

Information Systems Department  
College of Computing Sciences  
New Jersey Institute of Technology

5500 Guttenberg Information Technology Center  
University Heights  
Newark, New Jersey 07102-1982  
(973) 596-3368

Web Address: <http://web.njit.edu/~bieber/>  
Email Address: [bieber@njit.edu](mailto:bieber@njit.edu)

## I. EDUCATION

Ph.D. in Decision Sciences, December 1990.  
The Wharton School, University of Pennsylvania, Philadelphia.

M.A. in Decision Sciences, August 1990.  
The Wharton School, University of Pennsylvania, Philadelphia.

B.A.S./B.S.E. with separate majors in Computer Science, Finance, and Multinational Enterprises, 1980.  
Joint Degree Program: School of Engineering and the Wharton School, University of Pennsylvania.

## OTHER EDUCATION

Junior Year at the Ludwig-Maximilians Universität, Munich, Germany, 1978-1979.  
The American School in London, England, 1983-1986 (8-12th Grades).

## II. EXPERIENCE

### ACADEMIC APPOINTMENTS

Professor, New Jersey Institute of Technology, Department of Information Systems (2004-present).

- Interim Department Chair, Summer 2005 - Summer 2010
- Associate Department Chair, Fall 2010 – present
- Co-Director, Collaborative Hypermedia Research Laboratory, 2000-2009

Associate Professor, New Jersey Institute of Technology, Department of Information Systems (1999-2004).

Assistant Professor, New Jersey Institute of Technology, Department of Computer and Information Sciences (1992-1999; full-time as of Fall 1993).

- Director, Hypermedia Information Systems Research Laboratory, 1994-1999

Visiting Assistant Professor of Information Systems, Stern School of Business, New York University (Fall 1992-Spring 1993).

Assistant Professor, Boston College, Computer Science Department in the Carroll School of Management (Fall 1990-Summer 1992; Instructor 1989-1990).

*I was laid off from Boston College when the program under which I was hired was canceled due to budget constraints.*

### **NON-ACADEMIC EMPLOYMENT**

Systems Programmer, University of Pennsylvania, University Management Information Systems Department (1983-1985).

Systems Programmer, IBM, Endicott, New York (1980-1982).

Computer Operator/COBOL Programmer, Sperry Univac, London, England (Summer 1977) and Frankfurt, Germany (Summer 1978).

### **III. RESEARCH INTERESTS**

The major theme running through my research is making people and learning more effective. This underlies my original work in hypermedia starting in the 1980s, and continues in my projects, grants and publications concerning digital libraries, educational research, software engineering, web engineering, and virtual communities. (The teaching innovation section on collaborative exams briefly describes my research in Collaborative Learning through Assessment (CLASS).)

### **IV. PUBLICATIONS AND PRESENTATIONS**

#### **CITATIONS**

Google Scholar (includes self-references)

- November 2010: **1852** citations
- April 2007: **1046** citations

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*as of September 2004:*

Traditional Citation Count for publications: **461**

Count of other references on the Web: **37**

Total Count: **498**

*In the 2004 traditional citation count, I was careful to exclude all citations made by co-authors or me to our own works. Citations from the Web exclude all citations found through*

*other sources, all listings of my articles in journal and proceedings listings, and all calls for conferences and workshops including my name.*

#### **PUBLISHED BOOK CHAPTERS**

- *Each chapter listed was fully peer reviewed unless noted.*
- *The primary authors are underlined.*
- *Multiple authors underlined indicates an equal effort by each.*
- *Graduate student authors are marked with a “+”*

Catania, Joseph<sup>+</sup> and Michael Bieber, “Relationship Analysis: A Technique To Enhance Systems Analysis For Web Development,” forthcoming in Web Engineering: Principles and Techniques, Woojung Suh (ed.), Idea Group, 2004.

Bhaumik, Anirban<sup>+</sup>, Deepti Dixit<sup>+</sup>, Roberto Galnares<sup>+</sup>, Manolis Tzagarakis<sup>+</sup>, Michalis Vaitis<sup>+</sup>, Michael Bieber, Vincent Oria, Aparna Krishna<sup>+</sup>, Qiang Lu<sup>+</sup>, Firas Aljallad<sup>+</sup>, Li Zhang<sup>+</sup>, “Integrating Hypermedia Functionality into Database Applications,” Developing Quality Complex Database Systems: Practices, Techniques and Technologies, Becker, Shirley (ed.), 2001.

Turoff, Murray, Starr Roxanne Hiltz, Michael Bieber, Brian Whitworth and Jerry Fjermestad, “Computer Mediated Communications for Group Support: Past and Future,” (John Carroll, ed.) in Human-Computer Interaction in the New Millennium, Addison Wesley, 2001.

Yoo, Joonhee<sup>+</sup> and Bieber, Michael, “A Systematic Relationship Analysis for Modeling Information Domains” in Information Modeling in the New Millennium, Matti Rossi & Keng Siau (eds.), Idea Group, 2001.

Bieber, Michael, “Advancing Information Comprehension through Hypertext,” in Advances in Intelligent Hypertext, J. Mayfield & C. Nicholas (eds.), Springer-Verlag, 1997. *(reviewed by the book’s editors)*

#### **REFEREED JOURNAL PAPERS**

- *Each chapter listed was fully peer reviewed unless noted.*
- *The primary authors are underlined.*
- *Multiple authors underlined indicates an equal effort by each.*
- *Graduate student authors are marked with a “+”*

Dezhi Wu, Starr Roxanne Hiltz and Michael Bieber, “Acceptance of Educational Technology: Field Studies of Asynchronous Participatory Examinations,” *Communications of the Association for Information Systems* 26(21), 2010, 451-476.

Dezhi Wu, Michael Bieber and Starr Roxanne Hiltz, “Asynchronous Participatory Exams: Internet Innovation for Engaging Students,” *IEEE Internet Computing* 13(2), 2009, 44-50.

Dezhi Wu, Michael Bieber and Starr Roxanne Hiltz, “Engaging Students with Constructivist Participatory Examinations in Asynchronous Learning Networks,” *Journal of Information Systems Education* 19(2), 2008, 321-330.

- Shen, Jia, Roxanne Hiltz and Michael Bieber, "Learning Strategies in Online Collaborative Examinations," *IEEE Transactions on Professional Communication* 51(1), 2008, 63-78.
- Avery Gomez, Elizabeth, Dezhi Wu, Katia Passerini, and Michael Bieber, "Utilizing Web Tools for Computer-Mediated Communication to Enhance Team-based Learning," *International Journal of Web-based Learning and Teaching Technologies* 2(2), Idea Group Publishing, 2007, 21-37.
- Michael Bieber, Barbara McFall, Ronald Rice and Michael Gurstein, "Towards Systems Design for Supporting Enabling Communities," *Journal of Community Informatics* 3(1), 2007, [online journal].
- Shen, Jia, Roxanne Hiltz and Michael Bieber, "Collaborative Online Examinations: Impacts on Interaction, Learning, and Student Satisfaction," *IEEE Transactions on Systems, Man, and Cybernetics, Part A: Systems and Humans* 36(6), November 2006.
- Shen, Jia<sup>+</sup>, Michael Bieber and Roxanne Hiltz, "Participatory Examinations in Asynchronous Learning Networks: Longitudinal Evaluation Results," *Journal of Asynchronous Learning Networks* 9(3), 2005, 93-113.
- Yoo, Joonhee, Joseph Catanio<sup>+</sup>, Michael Bieber and Ravi Paul, "Relationship Analysis in Requirements Engineering," *Requirements Engineering* 9, 2004, 238-247.
- Catanio, Joseph<sup>+</sup>, Nkechi Nnadi<sup>+</sup>, Li Zhang<sup>+</sup>, Michael Bieber and Roberto Galnares, "Ubiquitous Metainformation and the WYWWYWI\* Principle," *Journal of Digital Information*, 5(1), April 2004. (\*What you want, when you want it)
- Bieber, Michael, Douglas Engelbart, Richard Furuta, Starr Roxanne Hiltz, John Noll, Jenny Preece, Edward Stohr, Murray Turoff and Bartel Van De Walle, "Towards Virtual Community Knowledge Evolution," *Journal of Management Information Systems* 18(4), 2002, 11-36.
- Balasubramanian, V., Michael Bieber and Tomás Isakowitz, "Systematic Hypermedia Design," *Information Systems Journal* 26(7), 2001, 295-320.
- Chiu, Chao-Min and Michael Bieber, "A Dynamically Mapped Open Hypermedia System Framework for Integrating Information Systems," *Information and Software Technology* 43, 2001, 75-86.
- Chiu, Chao-Min and Michael Bieber, "Toward Hypermedia Support for Information Relationship Management," *Journal of Information Science* 27(2) 2001, 93-100.
- Bieber, Michael, Harri Oinas-Kukkonen and V. Balasubramanian, "Hypertext Functionality," *ACM Computing Surveys* 31(4es), 1999.
- Bieber, Michael and Joonhee Yoo<sup>+</sup> "Hypermedia: A Design Philosophy," *ACM Computing Surveys*, 31(4es), 1999.
- Chiu, Chao-Min, Michael Bieber, Chin-Feng Lin<sup>+</sup> and Szu-Yuan Sun<sup>+</sup>, "Integrating Information Systems into the World Wide Web," *Systems Development Management*, August 1999.
- Turoff, Murray, Starr Roxanne Hiltz, Michael Bieber, Jerry Fjermestad and Ajaz Rana "Collaborative Discourse Structures in Computer Mediated Group Communications," *Journal of Computer Mediated Communication* 4(4), June 1999.
- Vitali, Fabio and Bieber, Michael, "Hypermedia on the Web: What Will It Take?," *ACM Computing Surveys*, 31(4es), 1999.

- Bieber, Michael and Vitali, Fabio, "Toward Support for Hypermedia on the World Wide Web," *IEEE Computer* 30(1), 1997, 62-70.
- Bieber, Michael, Fabio Vitali, Helen Ashman<sup>+</sup>, V. Balasubramanian<sup>+</sup> and Harri Oinas-Kukkonen<sup>+</sup>, "Fourth Generation Hypermedia: Some Missing Links for the World Wide Web," *International Journal of Human-Computer Studies* 47, 1997, 31-65.
- Vitali, Fabio, Chao-Min Chiu<sup>+</sup> and Michael Bieber, "Extending HTML in a Principled Way with Displets," *Computer Networks and ISDN Systems*, 1997.
- Bieber, Michael and Charles Kacmar, "Designing Hypertext Support for Computational Applications," *Communications of the ACM* 38(8), 1995, 99-107.
- Bieber, Michael, On Integrating Hypermedia into Decision Support and Other Information Systems, *Decision Support Systems* 14, 1995, 251-267.
- Bieber, Michael and Tomás Isakowitz, "Text Editing and Beyond: A Study in Logic Modeling," *Decision Support Systems* 11, 1994, North Holland, 219-240.
- Bieber, Michael and Steven O. Kimbrough, "On the Logic of Generalized Hypertext," *Decision Support Systems* 11, 1994, North Holland, 241-257.
- Hao, Xialong<sup>+</sup>, Jason Wang, Michael Bieber and Peter Ng, "Heuristic Classification of Office Documents," *International Journal on Artificial Intelligence Tools* 3(2), 1994, 233-265.
- Bieber, Michael, "Automating Hypermedia for Decision Support," *Hypermedia* 4(2), 1992, 83-110.
- Bieber, Michael and Steven O. Kimbrough, "On Generalizing the Concept of Hypertext," *Management Information Systems Quarterly* 16(1), 1992, 77-93.
- Kimbrough, Steven O., Clark Pritchett, Michael Bieber and Hemant Bhargava, "The Coast Guard's KSS Project," *Interfaces* 20(6), November/December 1990, pages 5-16.

## REFEREED CONFERENCE PAPERS

- *Each conference paper was fully peer reviewed. All hypertext and information systems conferences (with the exception of the Association of Information Systems Conference) are fully and stringently peer reviewed. I have included statements indicating the strictness of these peer reviews for most of the conferences in the Publications Appendix.*
- *It is widely acknowledged that the HICSS and ICIS conferences are the two top fully peer reviewed international research conferences in the field of information systems. The ACM Hypertext conferences (Hypertext'XX and ECHT'XX) were the major fully peer reviewed international research conferences in the hypermedia field.*
- *Reviews of articles appearing in my own conference minitrack at HICSS, the Hypermedia minitrack, were handled by the other minitrack co-coordinator in exactly the same manner as the other minitrack papers, in a process entirely blind to me.*
- *The primary authors are underlined. Multiple authors underlined indicates equal effort.*
- *Graduate student authors are marked with a "+"*

## PAPERS IN FULLY PEER REVIEWED CONFERENCES

- Ho, Shuyuan, Min Song and Michael Bieber, "IntegraL: The Effectiveness of a Link-based Federated Search Infrastructure," *iConference* 2010, 109-114.

Song, Min, Shuyuan Ho, Michael Bieber, Eric Koppel<sup>+</sup>, Vahid Hamidullah<sup>+</sup> and Pawel Bokota<sup>+</sup>, “A Scalable Digital Library Infrastructure Expands Search and Beyond,” *BookOnline 09*, Corfu, Greece, October 2009.

Min Song, I-Y. Song, K. J. Lee and Michael Bieber, “Automatic Extraction of Creating a Lexical Repository of Abbreviations in the Biomedical Literature,” *8th International Conference on Data Warehousing and Knowledge Discovery (DaWaK 2006)*.

Gomez, Elizabeth Avery<sup>+</sup>, Dezhi Wu, Katia Passerini, and Michael Bieber “Introducing Computer Supported Team-Based Learning: Preliminary Outcomes and Learning Impacts,” *Information Resources Management Association (IRMA)*, May 2006.

Gomez, Elizabeth Avery<sup>+</sup>, Dezhi Wu, Katia Passerini, and Michael Bieber, "Computer-Supported Learning Strategies: An Implementation and Assessment Framework for Team-Based Learning," *ISOneWorld*, April 2006.

Wong-Bushby, Irene<sup>+</sup>, Starr Roxanne Hiltz, Katia Passerini, Michael Bieber and Karen Patten<sup>+</sup>, “Scaffolding Discourse in Asynchronous Learning Networks,” *Proceedings of the Eleventh Americas Conference on Information Systems*, Omaha, August 2005, 586-591.

Avery Gomez, Elizabeth<sup>+</sup> and Michael Bieber, “Towards Active Team-Based Learning: An Online Instructional Strategy,” *Proceedings of the Eleventh Americas Conference on Information Systems*, Omaha, August 2005, 728-734.

Wong-Bushby, Irene<sup>+</sup>, Starr Roxanne Hiltz, Michael Bieber, Katia Passerini, Naomi Rotter and Karen Swan, “Using Content and Process Scaffolds to Support Collaborative Discourse in Asynchronous Learning Networks,” *Proceedings of the 38th Hawaii International Conference on System Sciences*, IEEE Press, Washington, D.C., January 2005.

Nnadi, Nkechi<sup>+</sup> and Michael Bieber, “Lightweight Integration of Documents and Services,” *Proceedings of the ACM Symposium on Document Engineering*, October 2004.

Zhang, Li<sup>+</sup>, Michael Bieber, David Millard and Vincent Oria, “Just-in-Time Hypermedia,” *Proceedings of the ACM Symposium on Document Engineering*, October 2004.

Shen, Jia<sup>+</sup>, Kung-E Cheng<sup>+</sup>, Michael Bieber and S. Roxanne Hiltz, “Traditional In-class Examination vs. Collaborative Online Examination in Asynchronous Learning Networks: Field Evaluation Results,” *Proceedings of the Americas Conference on Information Systems*, New York, August 2004, *Best Paper Nomination*.

Wu, Dezhi<sup>+</sup>, Michael Bieber, S. Roxanne Hiltz and Hyo-Joo Han, “Constructivist Learning with Participatory Examinations,” *Proceedings of the 37th Hawaii International Conference on System Sciences*, IEEE Press, Washington, D.C., January 2004, *Best Paper Nomination*.

Catania, Joseph<sup>+</sup>, Ashish Ghoda<sup>+</sup>, Atanu Pal<sup>+</sup>, Joonhee Yoo, Michael Bieber, Il Im, Ravi Paul and Fahri Yetim, "Relationship Analysis: A Research Plan for Enhancing Systems Analysis For Web Development," *Proceedings of the 36th Hawaii International Conference on System Sciences*, IEEE Press, Washington, D.C., January 2003.

Bieber, Michael, Il Im, Ron Rice, Ricki Goldman-Segall, Ravi Paul, Edward Stohr, Starr Roxanne Hiltz, Jennifer Preece, Murray Turoff, “Towards Knowledge-Sharing and Learning in Virtual Professional Communities,” *Proceedings of the 35th Hawaii International Conference on System Sciences*, IEEE Press, Washington, D.C., January 2002. [published in the Community Informatics Minitrack]

- Chiu, Chao-Min, Michael Bieber and Qiang Lu<sup>+</sup>, “Towards Integrating Hypermedia on the Web,” *Proceedings of the 34th Hawaii International Conference on System Sciences*, IEEE Press, Washington, D.C., January 2002. [published in the Managing Information on the Web Minitrack]
- Bhaumik, Anirban<sup>+</sup>, Deepti Dixit<sup>+</sup>, Roberto Galnares<sup>+</sup>, Manolis Tzagarakis<sup>+</sup>, Michalis Vaitis<sup>+</sup>, Michael Bieber, Vincent Oria, Aparna Krishna<sup>+</sup>, Qiang Lu<sup>+</sup>, Firas Aljallad<sup>+</sup>, Li Zhang<sup>+</sup>, “Towards Hypermedia Support for Database Systems,” *Proceedings of the 34th Hawaii International Conference on System Sciences*, IEEE Press, Washington, D.C., January 2001. [published in the Managing Information on the Web Minitrack]
- Bieber, Michael, Douglas Engelbart, Richard Furuta, Starr Roxanne Hiltz, John Noll, Jenny Preece, Edward Stohr, Murray Turoff and Bartel Van De Walle, “Virtual Community Knowledge Evolution,” *Proceedings of the 34th Hawaii International Conference on System Sciences*, IEEE Press, Washington, D.C., January 2001. [published in the Community Informatics Minitrack]
- Shen, Jia<sup>+</sup>, Roxanne Hiltz, Kung-E Cheng<sup>+</sup>, Yooncheong Cho<sup>+</sup> and Michael Bieber, “Collaborative Examinations for Asynchronous Learning Networks: Evaluation Results,” *Proceedings of the 34th Hawaii International Conference on System Sciences*, IEEE Press, Washington, D.C., January 2001. [published in the Asynchronous Learning Networks Minitrack]
- Yoo, Joonhee<sup>+</sup> and Michael Bieber, “Towards a Relationship Navigation Analysis,” *Proceedings of the 33rd Hawaii International Conference on System Sciences*, IEEE Press, Washington, D.C., January 2000. [published in the Internet Minitrack]
- Yoo, Joonhee<sup>+</sup> and Michael Bieber, “Finding Linking Opportunities through Relationship-based Analysis,” *Hypertext 2000 Proceedings*, San Antonio, ACM Press, June 2000.
- Turoff, Murray, Starr Roxanne Hiltz, Michael Bieber, Jerry Fjermestad and Ajaz Rana “Collaborative Discourse Structures in Computer Mediated Group Communications,” *Proceedings of the 32nd Hawaii International Conference on System Sciences*, IEEE Press, Washington, D.C., January 1999.
- M. Bieber, “Hypertext and Web Engineering,” *Hypertext '98 Proceedings*, ACM Press, New York, NY, June 1998, 277-278. (*The conference accepted only 14 out of 39 short papers submitted.*)
- Scherl, R., M. Bieber and F. Vitali, “A Situation Calculus Model of Hypertext,” *Proceedings of Thirty-First Annual Hawaii International Conference on System Science (HICSS)* (Kona, Jan. 1998). [published in the Logic Modeling minitrack]
- Vitali, Fabio, Chao-Min Chiu<sup>+</sup> and Michael Bieber, “Extending HTML in a Principled Way with Displets.” *Proceedings of the Sixth World Wide Web Conference*, 1997.
- Rana, A. and M. Bieber, “Towards a Collaborative Hypermedia Education Framework,” *Proceedings of Thirtieth Annual Hawaii International Conference on System Science (HICSS)* (Maui, Jan. 1997), Volume II 610-619. [published in the Technology-Supported Learning minitrack]
- Chiu, C.<sup>+</sup> and M. Bieber, “A Generic Dynamic-Mapping Wrapper for Open Hypertext System Support of Analytical Applications,” *Hypertext '97 Proceedings*, ACM Press, New York, NY,

April 1997, 218-219. (*This was reviewed by the executive program committee, which accepted only 14 out of 70 short papers.*)

Wan, Jiangling<sup>+</sup> and Michael Bieber, "Providing Relational Database Management Systems with Hypertext," *Proceedings of the Thirtieth Annual Hawaii International Conference on System Sciences* (Wailea, Maui; January 1997), IEEE Press, Washington, D.C., Volume VI, pages 160-166. [published in the Hypermedia minitrack]

Bieber, Michael, Fabio Vitali, Helen Ashman<sup>+</sup>, V. Balasubramanian<sup>+</sup> and Harri Oinas-Kukkonen<sup>+</sup>, "Some Hypermedia Ideas for the World Wide Web," *Proceedings of the Thirtieth Annual Hawaii International Conference on System Sciences* (Wailea, Maui; January 1997), IEEE Press, Washington, D.C., Volume IV, pages 309-319. [published in the Internet and Information Superhighway minitrack]

Wan, Jiangling<sup>+</sup> and Michael Bieber, "GHMI: A General Hypertext Data Model Supporting Integration of Hypertext and Information Systems," *Proceedings of the Twenty-Ninth Annual Hawaii International Conference on System Sciences* (Wailea, Maui; January 1996), IEEE Press, Washington, D.C., Volume II, pages 47-56. [published in the Logic Modeling minitrack]

Bieber, Michael, Tomás Isakowitz and James Oliver<sup>+</sup>, "An Analysis Framework for Information Comprehension and Access Management," *Proceedings of the Twenty-Eighth Annual Hawaii International Conference on System Sciences* (Wailea, Maui; January 1995), IEEE Press, Washington, D.C., Volume III, pages 390-400. [published in the Internet and Information Superhighway minitrack]

Wan, Jiangling<sup>+</sup>, Michael Bieber, Jason Wang and Peter Ng "LHM: A Logic-Based Hypertext Data Model for Integrating Hypertext and Information Systems," *Proceedings of the Twenty-Eighth Annual Hawaii International Conference on System Sciences* (Wailea, Maui; January 1995), IEEE Press, Washington, D.C., Volume III, pages 350-359. [published in the Logic Modeling minitrack]

Bieber, Michael and Jiangling Wan<sup>+</sup>, "Backtracking in a Multi-window Hypertext Environment," *European Conference on Hypermedia Technologies '94 Proceedings* (Edinburgh, Scotland; September 1994), ACM Press, 158-166.

Wan, Jiangling<sup>+</sup>, Michael Bieber, Jason Wang and Peter Ng "Document Management Through Hypertext: A Logic Modeling Approach," *Proceedings of the Twenty-Seventh Annual Hawaii International Conference on System Sciences* (Wailea, Maui; January 1994), IEEE Press, Washington, D.C., Volume III, pages 558-568. [published in the Logic Modeling minitrack]

Hao, Xialong<sup>+</sup>, Jason Wang, Michael Bieber and Peter Ng, "A Tool for Classifying Office Documents," *Proceedings of the Fifth International Conference on Tools with Artificial Intelligence*, Boston, November, 1993.

Bieber, Michael, "Providing Information Systems with Full Hypermedia Functionality," *Proceedings of the 26th Hawaii International Conference on System Sciences* (Wailea, Maui; January 1993), IEEE Press, Washington, D.C., Volume III, pages 390-400. [published in the Hypermedia minitrack]

Bieber, Michael, "Issues in Modeling a 'Dynamic' Hypertext Interface for Non-Hypertext Information Systems," *Proceedings of Hypertext '91* (San Antonio; December 15-18, 1991), ACM, pages 203-218.



Bieber, Michael P.<sup>+</sup> and Steven O. Kimbrough, “A Logic Model for Generalized Hypertext,” *Proceedings of the 23rd Hawaii International Conference on System Sciences* (Kona, Hawaii; January 1990), IEEE Press, Washington, D.C., Volume III. [published in the Logic Modeling minitrack]

Bieber, Michael and Tomás Isakowitz, “A Logic Model for Text Editing,” *Proceedings of the 22nd Hawaii International Conference on System Sciences* (Kona, Hawaii; January 1989), IEEE Press, Washington, D.C., Volume III, pages 543-552. [published in the Logic Modeling minitrack]

Bhargava, Hemant K.<sup>+</sup>, Michael P. Bieber<sup>+</sup> and Steven O. Kimbrough, “Oona, Max, and the WYWWYWI Principle: Generalized Hypertext and Model Management in a Symbolic Programming Environment,” in *Proceedings of the 9th International Conference on Information Systems* (Minneapolis; December 1988), pages 179-192.

### **PAPERS IN LIGHTLY REVIEWED CONFERENCES**

- *Undergraduate student authors are marked with a “++”*
- *I am unsure whether papers marked by (Δ) are in lightly or heavily refereed conferences.*

Dhami, Jay<sup>++</sup> and Michael Bieber, “Meta-information for the World Wide Web,” *National Conference on Undergraduate Research*, Rochester, April 8-10, 1999.

Chen, R.<sup>+</sup>, C.M. Chiu and M. Bieber, “A Hypermedia Based Delphi Method System for the World Wide Web,” *Proceedings of the Fourth Americas Conference of the Association of Information Systems*, August 1998, 988-990.

Chiu, C.M., R. Chen<sup>+</sup> and M. Bieber, “Integrating Third-party Applications and Information Systems Into the World Wide Web,” *Proceedings of the Fourth Americas Conference of the Association of Information Systems*, August 1998, 235-237.

Bieber, M., N. Coppola and A. Rana, “A Framework for Software Support of Educational Processes,” *Proceedings of the Third Biennial World Conference on Integrated Design and Process Technology*, Berlin, July 1998, Volume 6: 171-176.

Turoff, M., J. Fjermestad, A. Rana, M. Bieber and S. R. Hiltz “Collaborative Hypermedia in Virtual Reality Systems,” *Proceedings of the Third Americas Conference of the Association of Information Systems*, August 1997, 557-559.

Ramanathan, P.<sup>+</sup>, Bieber, M. & Rana, A. R., “Providing Metainformation for World Wide Web Links and Documents,” *Proceedings of the Third Americas Conference of the Association of Information Systems*, August 1997, 143-145.

Michael Bieber, Michael Bartolacci, Jerry Fjermestad, Hua Hua, Franz Kurfess, Qianhong Liu, Marvin Nakayama, Peter Ng, Richard Scherl, Richard Sweeney, Thomas Terry, Fabio Vitali, Jason Wang, Raymond Yeh, “Electronic Enterprise Engineering - An Outline of an Architecture,” *Proceedings of the 1997 IEEE Conference on Engineering of Computer-Based Systems*, Monterey, March 1997. (Δ)

Chiu, C.M.<sup>+</sup> and Bieber, M., “Integrating the World Wide Web with Information Systems,” *Proceedings of the Third Americas Conference of the Association of Information Systems*, August 1997, 149-151.

Bieber, Michael, What Every Developer Should Know About Hypertext. *Proceedings of the Second Americas Conference of the Association of Information Systems*, 1996, 179-181.

Bartolacci, Michael, Michael Bieber, Jerry Fjermestad, Hua Hua, Franz Kurfess, Qianhong Liu, Marvin Nakayama, Peter Ng, Richard Scherl, Richard Sweeney, Thomas Terry, Fabio Vitali, Jason Wang, Raymond Yeh, “Comprehensive Electronic Enterprise Support,” *Proceedings of the Second Americas Conference of the Association of Information Systems*, Phoenix, August 1996.

Chiu, C.M.<sup>+</sup> and Bieber, M., “An Open Hypermedia System for Integrating Information Systems,” *Proceedings of the Second Americas Conference of the Association of Information Systems*, August 1996, 176-178.

Kimbrough, Steven O., Clark W. Pritchett, Michael P. Bieber and Hemant K. Bhargava, “An Overview of the Coast Guard’s KSS Project: DSS Concepts and Technology,” *Transactions of DSS-90* (Boston; May 21-23, 1990), TIMS, pages 63-77. [received the conference’s OUTSTANDING DSS APPLICATIONS AND ACHIEVEMENTS AWARD] (Δ)

## **ENCYCLOPEDIA ENTRIES**

Bieber, Michael, Jia Shen, Dezhi Wu and Starr Roxanne Hiltz “PLA: Participatory Learning Approach,” *The Encyclopedia of Distance Learning, Teaching, Technologies, and Applications*, Patricia Rogers (ed.), Idea Group. 2005.

Bieber, Michael, “Hypertext,” *Concise Encyclopedia of Computer Science*, Edwin Reilly (ed.), John Wiley & Sons Ltd., 2004, 363-366.

Bieber, Michael, “Hypertext,” *Encyclopedia of Computer Science* (4th Edition), Ralston, A., Edwin Reilly and David Hemmendinger (eds.), Nature Publishing Group, 2000, 799-805.

## **PUBLISHED WORKSHOP PAPERS**

Song, M. and Bieber, M., “IntegraL: Lightweight Link-based Integration of Heterogeneous Digital Library Collections and Services in the Deep Web,” *The Semantic Web meets the Deep Web workshop*, in conjunction with IEEE Joint Conference on E-Commerce. Technology and Enterprise Computing, E-Commerce and E-Services 2008. 20-26.

Bieber, Michael, Roberto Galnares<sup>+</sup> and Qiang Lu<sup>+</sup>, “Service Integration for Virtual Communities,” *Web Engineering Workshop*, International World Wide Web 10 Conference, Hong Kong, May 2001.

Bieber, Michael, “Web Engineering,” in K. Kuutti (ed). *Proceedings of the Sixth International Workshop on Incorporating Hypertext Functionality Into Software Systems (HTF VI)*, International Conference on Information Systems, Helsinki, December 1998.

Bieber, M., R. Galnares<sup>+</sup> and Q. Lu, “Web Engineering and Flexible Hypermedia” in P. Brusilovsky (ed). *Proceedings of the Second Workshop on Adaptive Hypertext and Hypermedia, Hypertext’98 Conference*, Pittsburgh, June 1998.

Bieber, Michael, “Web Engineering” in G. Rossi and H. Ziv (eds). Proceedings of the Fifth International Workshop on Incorporating Hypertext Functionality Into Software Systems (HTF V), International Conference on Software Engineering, Kyoto, April 1998.

Bieber, Michael, “Web Engineering,” in C. Watters and F. Vitali (eds). Proceedings of the Fourth International Workshop on Incorporating Hypertext Functionality Into Software Systems (HTF IV), World Wide Web7 Conference, Brisbane, April 1998.

Bieber, Michael, “Why Hypertext?,” in Ashman et al. (eds). Proceedings of the Third International Workshop on Incorporating Hypertext Functionality Into Software Systems (HTF III), Hypertext ‘97 Conference, Southampton UK, April 1997.

Bieber, Michael, “What Every Systems Developer Should Know about Hypertext,” in Ashman et al. (eds). Proceedings of the Second International Workshop on Incorporating Hypertext Functionality Into Software Systems (HTF II), Hypertext ‘96 Conference, Bethesda, March 1996.

Bieber, Michael and Charles Kacmar, “Hypertext Support for Computational Applications,” in Ashman et al. (eds). Proceedings of the First International Workshop on Incorporating Hypertext Functionality Into Software Systems (HTF I), European Conference on Hypermedia Technologies (ECHT’94), Edinburgh, September 1994.

Bieber, Michael, “Dynamically Incorporating Hypermedia Functionality into Information Systems,” *Proceedings of the Conference on Information Knowledge Management Workshop on Intelligent Hypertext* (Gaithersburg, Maryland; December 1994).

Wan, Jiangling<sup>+</sup>, Michael Bieber, Jason Wang and Peter Ng “GHMI: A General Hypertext Data Model for Integrating Hypertext and Information Systems,” *Proceedings of the Conference on Information Knowledge Management Workshop on Intelligent Hypertext* (Gaithersburg, Maryland; December 1994).

## **PROFESSIONAL PRESENTATIONS: REFEREED PANELS**

*Each of these panels was peer reviewed by the conference program committees.*

“What’s So Different About the World Wide Web Anyway”

International Conference on Information Systems, Helsinki, December 1998.

*Panelists:* Sue Conger (Southern Methodist University), Blake Ives (Louisiana State University), Wolfgang Janko (Vienna University of Economics and Business Administration), Bob O’Keefe (Brunel University, U.K.)

*Moderator and Organizer:* Michael Bieber

“Will Hypertext Become the Web’s Missing Link?”

World Wide Web 7 Conference, Brisbane, April 1997.

*Panelists:* Michael Bieber (NJIT), Cathy Marshall (Xerox Corp.), Donald Retallack (Boeing, Corp.), Anne-Marie Vercoustre (INRIA, France), Bebo White (Stanford University)

*Moderator:* Wendy Hall, University of Southampton, UK

*Organizer:* Michael Bieber

*\* Like the others listed here, this panel was fully peer reviewed. As I was panels chair for the conference, I had someone else handle its review. It was accepted solely on these results.*

“Enhancing the Stature of the Information Systems Field”

International Conference on Information Systems, Cleveland, December 1996.

*Panelists:* Bill King (University of Pittsburgh), Niels Bjorn-Anderson (Copenhagen Business School), Allen Alter (Computerworld), Patrick Porter (Software Magazine), Dick Davis (Richard E. Davis Group), Bob Trombley (Ohio Blue Cross/Blue Shield)

*Moderator and Organizer:* Michael Bieber

“Issues of Privacy and Accuracy for Information Systems in the 1990s and Beyond”

International Conference on Information Systems, Orlando, December 1993.

*Panelists:* Roger Clarke (Australia National University), Robert Kling (University of California at Irvine) and Peggy O’Rourke (Internal Revenue Service)

*Moderator and Organizer:* Michael Bieber

“New Horizons for Hypermedia in Information Systems”

International Conference on Information Systems, Dallas, December 1992.

*Panelists:* Tomás Isakowitz (New York University), Steven O. Kimbrough (University of Pennsylvania) and Christopher Westland (University of Southern California)

*Moderator and Organizer:* Michael Bieber

“Hypermedia Automation: Hand-Craft or Witchcraft?”

European Conference on Hypertext, Milan, Italy, December 1992.

*Panelists:* Michael Bieber, Richard Furuta (University of Maryland), Michael Kibby (University of Strathclyde), Catherine Marshall (Xerox PARC) and Paolo Paolini (Politecnico di Milano)

*Moderator:* Mark Bernstein (Eastgate Systems); *Organizer:* Michael Bieber

“Expert Systems and Hypertext”

Hypertext ‘89 Conference, Pittsburgh, November 1989.

*Panelists:* Steven Feiner (Columbia University), Mark Frisse (Washington University), Philip Hayes (Carnegie Group), Gerri Peper (IBM, Boulder) and Walt Scacchi (University of Southern California)

*Moderator and Organizer:* Michael Bieber

## **PROFESSIONAL PRESENTATIONS: TUTORIALS**

Bieber, Michael, “Relationship Analysis: A Systematic Approach to Linking on the Web,” 34th Hawaii International Conference on System Sciences, Hawaii, January 2001. (*half day*)

Bieber, Michael, “Applying Hypertext Principles to Information Systems,” Hypertext’98 Conference, Pittsburgh, June 1998. (*half day*)

Bieber, Michael, “What Every Software Engineer Should Know about Hypermedia for Designing World Wide Web Applications,” 20th International Conference on Software Engineering, Kyoto, April 1998. (*full day*)

Bieber, Michael, “Applying Hypertext to the World Wide Web,” 31st Hawaii International Conference on System Sciences, Hawaii, January 1998. (*half day*)

Bieber, Michael, “Applying Hypertext to the World Wide Web,” AusWeb’97 Conference, Gold Coast, Australia, July 1997. (*full day*)

Bieber, Michael and Tomás Isakowitz, “Hypermedia on the World Wide Web,” 30th Hawaii International Conference on System Sciences, Maui, January 1997. (*full day*)

Bieber, Michael and Tomás Isakowitz, “An Introduction to Hypermedia Information Systems,” *Proceedings of the First Americas Conference on Information Systems*, (Pittsburgh, August 25-27), 1995, page 552. (*1.5 hours*)

### **PROFESSIONAL PRESENTATIONS: INVITED TALKS**

*Note: For talks marked with an asterisk (\*), the institution paid my expenses, sometimes in collaboration with other institutions in the area. The others were not funded by the institution as I was already in the local area for a conference or other reasons.*

“Lightweight Wrapper Technology and the Future of the Integrated Virtual Library,” Information Futures Institute, April 2005. (*\*partial*)

“Using PLA to Liberate Learning,” Hong Kong University (Experts Address Series), November 2003. (\*)

“Ubiquitous Metainformation and the WYWWYWI Principle,” Hong Kong University (Experts Address Series), November 2003. (\*)

“Digital Library Service Integration,” Hong Kong University Library, November 2003.

“Using PLA to Liberate Learning,” First Kaohsiung University of Science and Technology, Kaohsiung, Taiwan, November 2003. (\*)

“Using PLA to Liberate Learning,” National Sun Yat Sen University, Kaohsiung, Taiwan, Kaohsiung, Taiwan, November 2003. (\*)

“Using PLA to Liberate Learning,” Chinese University of Hong Kong, November 2003. (\*)

“Getting Journal Articles Published,” First Kaohsiung University of Science and Technology, Kaohsiung, Taiwan, November 2003. (\*)

“Participatory Learning,” Florida International University, IS Department, Miami, April 2003.

“Digital Library Service Integration,” National Research Institute for Mathematics and Computer Science (CWI), Amsterdam, Netherlands, December 2002.

“Relationship Management,” Tilburg University, Netherlands, December 2002. (\*)

“Relationship Management,” Technical University of Eindhoven, Netherlands, December 2002. (\*)

“Collaborative Examinations,” Concordia University, Montreal, Canada, October 2002.

“Virtual Community Knowledge Support,” City University, Hong Kong, May 2001. (\*)

“Virtual Community Knowledge Support,” National Sun Yat-Sen University, Taiwan, May 2001. (\*)

“Relationship Management,” Suzhou University, Suzhou, China, May 2000. (\*)

“Web Engineering,” National University of La Plata, Argentina, July 1999. (\*)

“Web Engineering,” University of Montpellier, France, February 1999.

“Relationship Management,” University of Hagen, Germany, February 1999. (\*)

- “Relationship Management,” Technical University of Karlsruhe, Germany, February 1999. (\*)
- “Web Engineering,” Nuclear Research Center, Mol, Belgium, July 1998. (\*)
- “Web Engineering,” Keio University, Fujisawa, Japan, April 1998.
- “The Greatest Danger with the World Wide Web,” University of Georgia, Athens, Georgia, September 1997.
- “The Greatest Danger with the World Wide Web,” Georgia State University, Atlanta, September 1997. (\*)
- “The Greatest Danger with the World Wide Web,” Developers Day Workshop, AusWeb’97 Conference, July 1997. (\*)
- “What Every Developer Should Know About Hypertext (on and off the World Wide Web),” Australian Defence Science and Technology Organisation, Canberra, Australia, July 1997. (\*)
- “What Every Developer Should Know About Hypertext (on and off the World Wide Web),” Australia National University, Canberra, Australia, July 1997.
- “What Every Developer Should Know About Hypertext (on and off the World Wide Web),” University of Melbourne, Australia, July 1997.
- “A Collaborative Hypermedia Educational Framework,” Australia Defence Force Academy, Canberra, July 1997. (\*)
- “What Every Developer Should Know About Hypertext (on and off the World Wide Web),” Monash University, Melbourne, Australia, June 1997.
- “What Every Developer Should Know About Hypertext (on and off the World Wide Web),” Siemens Research Corporation, Princeton NJ, January 1997.
- “Dynamically Incorporating Hypermedia Functionality into Information Systems,” University of Southampton, England, November 1994.
- “Architecture of a Hypermedia Engine: Providing Hypermedia Functionality for Information Systems,” Institutes for Information Processing, Graz, Austria, June 1992. (\*)
- “A Hypertext Knowledge-Based Decision Support System,” European Computer-Industry Research Centre, Munich, Germany, July 1991.
- “Automating Hypertext for Decision Support,” Hypermedia ‘90 Conference, Houston, Dec. 1990. (\*)

## **V. GRANTS**

*Title:* IntLib

*Funding Agency:* Institute of Museum and Library Services (*a federal agency*)

*Duration:* 1/05 - 12/07

*Amount:* \$498,000

*PI:* M. Bieber; *Co-PIs:* L. Hernandez (Newark Public Library), I. Im (IS), R. Sweeney (NJIT, Van Houten Library), Y. Wu (IS)

*Title:* Integral

*Funding Agency:* NSF

*Duration:* 12/04 - 11/07

*Amount:* \$850,000

*PI:* M. Bieber; *Co-PIs:* I. Im (IS), R. Sweeney (NJIT, Van Houten Library), Y. Wu (IS)

*Title:* General Recommendation Engine

*Funding Agency:* NSF

*Duration:* 10/04 - 9/07

*Amount:* \$800,000

*PI:* I. Im (IS); *Co-PIs:* M. Bieber (IS), Vincent Oria (Computer Science), Y. Wu (IS)

*Title:* Connecting Canadians via Community Networking

*Funding Agency:* Social Science and Humanities Research Council, Canada

*Duration:* several years starting Spring 2004

*Amount:* \$1m (approximate)

*PI:* A. Clement (University of Toronto); *Co-PI:* M. Gurstein (School of Management), others in Canada; *Investigator:* M. Bieber

*Title:* Digital Library Service Integration

*Funding Agency:* NSF (National Science, Technology, Education and Mathematics Digital Library Program)

*Duration:* 9/02 - 8/04

*Amount:* \$475,000

*PI:* M. Bieber

*Co-PIs:* I. Im (IS), Y. Wu (IS)

*Title:* Virtual Community Informatics: Towards the Systematic Study of Technology-Enabled Virtual and Geo-Local Communities

*Funding Agency:* NSF

*Duration:* 3/02 - 2/03

*Amount:* \$16,232

*PI:* M. Bieber

*Co-PI:* M. Gurstein (School of Management)

*Title:* Deeply Understanding Complex Systems through Relationship Analysis

*Funding Agency:* NSF (Biocomplexity Incubation Grant)

*Duration:* 1/00 - 12/02

*Amount:* \$100,000

*PI:* M. Bieber

*Co-PIs:* N. Coppola (Humanities), B. Van de Walle (IS), B. Whitworth (IS)

*Title:* Collaborative Hypermedia

*Funding Agency:* NSF

*Duration:* 1/99 - 12/02

*Amount:* \$135,000

*PI:* M. Bieber

*Co-PIs:* J. Fjermestad (School of Management), R. Hiltz (IS), F. Kurfess (IS), R. Scherl (CS)

*Title:* Collaborative Hypermedia

*Funding Agency:* NJIT Research Computing Facilities

*Duration:* 1/99 - 12/02

*Amount:* \$99,000

*PI:* R. Hiltz

*Co-PIs:* M. Bieber (IS), others

*Title:* Smart Diagnostic and Repair Tool (DART) for the FMTV (Smart Truck), M1083, 5-ton Truck, J1939 Data Bus

*Funding Agency:* Defense Advanced Research Projects Agency (DARPA)

*Duration:* 1/98 to 6/98

*Amount:* Total: \$1,200,000 (approx.) NJIT Portion: \$410,110

*PI:* Steve Tricamo

*role:* M. Bieber, P. Ranky, D. Sebastian (on project team)

*Title:* Information Transfer and Training through the Sustainable Green Manufacturing Training Program (within the Sustainable Green Manufacturing contract)

*Funding Agency:* U.S. Army

*Duration:* 9/97 - 9/98

*Amount:* \$750,000 (approximate; for this particular project)

*role:* M. Bieber, Nancy Coppola, Patrick Beaton (investigators for this area)

*Title:* Green Process Simulation-Environmental Lifecycle Model (within the Sustainable Green Manufacturing contract)

*Funding Agency:* U.S. Army

*Duration:* 9/97 - 9/98

*Amount:* \$237,795 (for this particular project)

*role:* Marcus Healey, Jeff Anstine, Michael Bieber, Franz Kurfess, Qianhong Liu, Peter Ng, Rich Scherl and Murat Tanik (investigators for this area)

*Title:* Multi-modal Freight Transportation: Regional Data Development and Analysis, Tasks 5-7, Phase 2

*Funding Agency:* New Jersey Department of Transportation; National Center for Transportation and Industrial Productivity (NCTIP)

*Duration:* 1/97 - 12/97

*Amount:* \$405,250

*Co-PIs:* L. Spasovic (Institute for Transportation), M. Bieber, A. Bladikas (Institute for Transportation)



*Title:* Multi-modal Freight Transportation: Regional Data Development and Analysis, Tasks 1-4, Phase 1

*Funding Agency:* New Jersey Department of Transportation; National Center for Transportation and Industrial Productivity (NCTIP)

*Duration:* 1995-1998

*Amount:* \$517,823

*Co-PIs:* L. Spasovic (Institute for Transportation), M. Bieber, A. Bladikas (Institute for Transportation)

*Title:* JOVE Faculty Fellowship

*Funding Agency:* NASA

*Duration:* 5/94 - 5/98

*Amount:* \$98,000

*PI:* M. Bieber

*Title:* New Jersey Center for Multimedia Research

*Funding Agency:* NJ Commission for Science and Technology, NSF

*Duration:* 9/96 - 8/2001

*Amount:* \$5,000,000+

*role:* M. Bieber (investigator within the Collaborative Hypermedia group)

NJCMR funded the next prototype of the Dynamic Hypermedia Engine project.

## **VI. TEACHING AND ADVISING ACTIVITIES**

### **NEW COURSES DEVELOPED**

- CIS105M: COBOL
- CIS265: Information Systems and Productivity Toolware
- CIS270: Multimedia Information Systems
- CIS337: World Wide Web Standards
- CIS365: Computer Applications to Commercial Problems (*revamped*)
- CIS658: Multimedia Systems
- CIS677: Information Systems Principles (*revamped*)
- CIS786: Virtual Communities
- MC340: Management Information Systems (at Boston College)

### **SELECTED TEACHING INNOVATIONS**

- Distance Learning for CIS 105M: In 1997 I volunteered to videotape CIS105M, a basic COBOL programming course. Instead of taping a straight lecture, I arranged with one of my RAs to act out a scenario each week in front of a live class. The RA played a project manager and I play a COBOL consultant. We taped a 25-minute discussion, in

which the client had a problem and I explained how to solve it with COBOL. We intended this to be more interesting to learn from than a traditional lecture.

- Distance Learning for CIS 677: CIS677 is the introductory graduate survey course, covering a different topic in Information Systems each week. In 1999 instead of videotaping my lectures, I decided to tape CIS677 as a discussion. Each week I invited an academic guest and sometimes also a practitioner. Guests included professors from NJIT (Roxanne Hiltz, Murray Turoff, and three Ph.D. students), Rutgers (Nabil Adams), NYU (Hank Lucas and Jon Turner), and for one class a telephone link from the University of Texas at Austin (Sirkka Jarvenpaa). Each discussion was well-scripted so it would cover the important theories and concepts that I would have covered in my lectures. But being a discussion taped in front of a live class, the atmosphere was more informal and lively, with students asking questions that sometimes really put us on the spot!
- Collaborative Exams: The Collaborative Exam is an integrative process that actively engages students in the full life cycle of examinations. The core idea is that students design exam problems, solve them, and then evaluate and grade their peers' problems and solutions. Designing problems and evaluating solutions challenges students to (a) analyze course materials in order to determine the most important aspects for assessment, (b) critically assess their peers' understanding of a subject, and (c) deliberate how fully a body of information (the solution) fits their own understanding of course materials and the problem posed. Students learn from this process in several ways. They learn from creating questions, from reviewing the questions that others create, from answering questions, from grading the answers, from reviewing the second-opinion grading on their answers, and from reviewing other people's answers and grading justifications.

I developed this approach in 1999, and it has been used in many undergraduate and graduate classes by several NJIT faculty with rigorous evaluation, resulting in numerous publications and a dissertation (Jia Shen, 2005). Experiments show that students perceive they indeed learn more, they like this format better, and they would recommend it for other classes. This is part of a larger initiative I am developing called Collaborative Learning through Assessment (CLASS).

- Team-Based Learning: Starting 2004, in several courses I utilized a new approach called team-based learning (TBL). In searching for a way to make team projects more effective, I had the good fortune to stumble across Michaelsen et al.'s [2004] book on TBL. TBL is structured to avoid the problems associated with groups and group work, such as scheduling difficulties and uneven participation. The class period is devoted exclusively to team activities. Outside class is devoted exclusively to individual activities and preparation for class. Because lecturing is assumed to take up valuable time rephrasing the information in the course materials, the professor does not lecture. Instead the professor acts as a mentor, designing study materials and working in-class individually with each team as they collaborate on activities. (Designing challenging class activities involves a large amount of preparation for the professor.) Students are very enthusiastic and I experience livelier classes and more engaged students than with a traditional lecture approach.

Reference: L. Michaelsen, A. Bauman Knight, L. D. Fink (eds). Team-based Learning: A Transformative Use of Small Groups in College Teaching, 2004, Sterling, VA: Stylus Publishing.

- Graduate Co-op Program: I developed a new way to mentor the Co-op program. The goals were both for students to gain work experience and to learn by reflecting upon their experience. I initiated a Virtual Classroom environment (a precursor to WebCT and Moodle) with co-op students. This created a community among the students, where they actively participate in discussions about each others' experiences, and where they can turn to each other and to the faculty mentor for help and advice. In March 2002 NJIT's Career Services Division honored me with the "Faculty Service to the Cooperative Education Program" award for these innovations.
- English Skills Course for IS Majors (ENG598; in conjunction with S. Roxanne Hiltz): For many years the MS IS program required students to read and critique academic research articles. Most students, however, had never experienced an academic research article and found this requirement quite challenging. In 2001, Roxanne Hiltz and I worked with Jerry Paris of Humanities to alleviate this situation. This resulted in a readings course that was assigned to any U.S. student with poor undergraduate humanities grades and any foreign student scoring less than 60% on the verbal portion of the GRE exam. The course, ENG598, ran for many semesters.
- What Professors Do: A colleague at Boston College shared this idea with me originally. A college professor's job is very poorly understood by some very important constituents: students, legislators who provide funding, and the public at large. My colleague would take time out each semester in each of his classes to discuss the responsibilities of our profession. He felt students should hear this every semester from multiple sources. It helps students understand why we have to miss classes, why we have limited office hours and aren't always available, and especially in justifying why many of us only spend 6 or 9 hours a week in the classroom. ("Are we at the golf course the other hours?") Communicating our full responsibilities may inject some reality checks into both educational and budget reform.
 

Every semester I take time out to explain to my classes (on-campus and distance) what the job of a professor is. It also gives me the opportunity to explain NJIT's commitment to research and encourage students to participate on faculty research projects. This explanation also is posted as a resource on my Web site.
- In general I am a champion for distance learning. I have taught distance learning courses since 1994, and have promoted their use and rigor in numerous ways.

## **ADVISING**

### **Dissertation Advisor for Ph.D. Graduates<sup>1</sup>**

**Jia Shen, Ph.D., IS Department, NJIT, May 2005** (Co-advisor with S. Roxanne Hiltz)

Dissertation Title: "Collaborative Examinations in Asynchronous Learning Networks: Field Experiments on Collaborative Learning through Online Assessments"

**Joseph Catanio, Ph.D., IS Department, NJIT, May 2004**

*(selected as the Ph.D. student speaker at commencement exercises)*

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<sup>1</sup> I was the sole dissertation advisor for several students in the joint NJIT-Rutgers Ph.D. program.

Dissertation Title: "Relationship Analysis: Improving the Systems Analysis Process"

**Roberto Galnares, Ph.D., CIS Department, NJIT, May 2001**

Dissertation Title: "Augmenting Applications with Hypermedia Functionality and Meta-information"

**Joonhee Yoo, Ph.D., Rutgers University, May 2000**

Dissertation Title: "Relationship Analysis"

**Chao-Min Chiu, Ph.D., Rutgers University, October 1997**

Dissertation Title: "Fusing the World Wide Web and Open Hypermedia System Technologies"

**Jiangling Wan, Ph.D., CIS Department, NJIT, May 1996**

Dissertation Title: "Integrating Hypertext with Information Systems through Dynamic Mapping"

### **Dissertation Committees**

I have also participated on many dissertation committees.

### **Advisor for Undergraduate Senior Projects and Masters Projects**

- Through Fall 2004, I have advised 77 masters projects, 5 masters theses, and 3 senior projects.
- In 2002-2003, I also worked with approximately 20 undergraduate students in four CIS490 and CIS491 (software engineering courses) teams on research under the Digital Library Service Integration grant.
- My research grants have funded numerous undergraduate, masters and Ph.D. students to collaborate with the various grant investigators, which has provided insightful personal research experience for these students, as well as greatly benefiting our projects.

## **VII. SERVICE**

### **SERVICE TO THE UNIVERSITY COMMUNITY**

#### **Interim Department Chair**

- Interim Department Chair (2005-2010)

#### **Associate Chair**

- Associate Department Chair (Fall 2010-present)

#### **Ph.D. Director<sup>2</sup>**

- Ph.D. Director (Fall 2010-present, 2004-2005)

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<sup>2</sup> The Ph.D., MS and Undergraduate Directors were referred to as "Associate Chairs" until 2005.

### **MS Director**<sup>3</sup>

- MS Director (Fall 2010-present, 2008-2009, 2000-2003)

### **Undergraduate Director**

- Undergraduate Director (Fall 2010-present)
- Interim Undergraduate Director (Spring 2009)

### **Department Committee Service**

- Promotion and Tenure Committee (chair 2005-present)
- Ph.D. Committee (chair 2010-present; member 2007-2009)
- MS Curriculum Committee (chair 1997-2000, 2008-present; member 2007-2008)
- Undergraduate Curriculum Committee, (chair 2008-2009, 2010-present; member 1995-1996)
- Recruiting Committee (chair 1999-2002; member 1997-2006)
- I have overseen recruiting 7 members of the IS Department  
*(these do not include recruiting Marilyn Tremaine and Michael Recce, whose cases were handled separately)*

### **College Committee Service**

- CCS Awards Committee (2005-present)
- GUR Committee (Spring 2006)
- CCS Executive Committee (2002-2004)
- Computing Resources Committee (1996-1997)

### **University Committee Service**

- Graduate Council (2001-2003, 2007-present)
- Undergraduate Curriculum Review Committee (UCRC) (2008-2009, 2010-present)
- Faculty Council (2010-present)
- Institutional Research Board, Behavioral Research Group (2010-present)
- Middle States Accreditation, Working Group 2 (2009-present)
- Strategic Planning Tactics Subcommittee (2009-2010)
- Committee on Academic Affairs (2005-2010)
- Library Committee (2008-2009)
- Dean Search Committee (2005-2006)
- Graduate Growth Initiative (2005-2006)

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<sup>3</sup> The MS Director serves all MS programs in Information Systems except the MS in Emergency Management and Business Continuity.

### **Department Webmaster**

- I revamped the IS Department Web site in Summer 2001 and maintained it through Spring 2002. As Interim Chair starting 2005 I again became deeply involved in upgrading the web site content.
- I also developed and maintained the MS IS program Web site independently until University Web Services was formed.

### **Other Service to the University Community**

- Rutgers Executive Ph.D. Committee (CIS/CCS liaison to this Rutgers University committee; 1994 to 2003)
- PSA (Union) Executive Committee (Fall 2004)
- Enterprise Engineering Architecture and Design Program (Associate Director 1996-1998)
- Review Committee for the MS in Professional and Technical Communication (2002-2003)
- I regularly invite international students and new faculty to my home on holidays such as Labor Day, Thanksgiving and July 4<sup>th</sup>. I also periodically host parties for our Ph.D. program and research community.

### **SERVICE TO THE RESEARCH COMMUNITY**

#### **Visiting Scholars Invited**

I invited the following visiting scholars to work with me in the Collaborative Hypermedia Research Laboratory.

- Jianjiang Lu, Suzhou University, China - Fall 2005 through Summer 2006
- Changbo Qiu, Jilin University of Technology, China - Fall 2000 through Spring 2001
- Fahri Yetim, University of Konstance, Germany - Fall 2001 to Summer 2004
- Lü Qiang, Soochow University, China - Fall 1997 through Spring 1998
- Fabio Vitali, University of Bologna, Italy - Spring 1996

#### **Grant Review Panels**

- Participated in over 10 NSF Award Panels (1999-2010)
- Fulbright Reviewer (2009)
- I have reviewed several grant proposals for the Social Science and Humanities Research Council, Canada

#### **Conference Minitrack Coordinators**

- Co-Chair for the 2002 HICSS minitrack on “Community Informatics”
- Co-Chair for the 1999 HICSS minitrack on “Web Information Systems”  
(I also helped draft the proposal to establish this minitrack.)
- Co-Coordinator for the 1999 HICSS minitrack on “Web Information Systems”

- Co-Coordinator for the 1998 HICSS minitracks on “Coping with Information Overload” and “Web Information Systems”
- Co-Coordinator for the 1993-1997 HICSS minitracks on “Hypermedia in Information Systems and Organizations”

### **Conference Organization**

- WWW 2003 (12th International World Wide Conference), Budapest, May 2003, *Workshops and Tutorials Co-Chair*
- WWW11 (11th International World Wide Conference), Honolulu, May 2002, *Workshops and Tutorials Co-Chair*
- WWW8 (World Wide Web-8 Conference), Toronto, May 1999, *Panels Co-Chair*
- WWW7 (World Wide Web-7 Conference), Brisbane, Australia, April 1998, *Panels Co-Chair*
- ACM Hypertext’97, Southampton UK, April 1997, *Panels and Perspectives Co-Chair*
- ACM Hypertext’93, Student Volunteer Co-Chair

### **Workshop Organization**

(Virtual) Community Informatics

at the 24th International Conference on Information Systems, Barcelona, December 2002

- Michael Bieber and Mike Gurstein (chairs)

(Virtual) Community Informatics

at the 8th Directions and Implications of Advanced Computing (DIAC) Symposium, Seattle, May 2002

- Michael Bieber and Mike Gurstein (chairs)

Virtual Documents: Hypertext Functionality in Digital Libraries

at the ACM Digital Libraries 2000 Conference

- Carolyn Watters and Michael Bieber (chairs)

Hypertext Functionality III: Hypertext’97, Southampton, UK.

Hypertext Functionality II: Hypertext’96, Washington D.C.

Hypertext Functionality I: European Conference on Hypermedia Technologies’94, Edinburgh, Scotland

### **EDITORIAL ACTIVITY**

#### **Special Journal Issues**

Ashman, H., Balasubramanian V., Bieber, M. and Oinas-Kukkonen, H. (eds.), “Hypertext Functionality,” *Journal of Digital Information*, 1998.

Bieber, M. and Isakowitz, T. (eds.), “Hypermedia in Information Systems and Organizations,” *Journal of Organizational Computing and Electronic Commerce* 6(3), 1996.

#### **Special Journal Sections**

Isakowitz, T., Bieber M. and Vitali, F. (eds.), “Web Information Systems,” *Communications of the ACM* 41(7), 1998.

Bieber, M. and Isakowitz, T. (eds.), "Designing Hypermedia Applications," *Communications of the ACM* 38(8), 1995.

*We are especially proud to include opening statements by Ted Nelson and Doug Engelbart, the founding fathers of the hypertext field.*

Isakowitz, T. and M. Bieber (eds.), "Navigation in Information-Intensive Environments," *Journal of Management Information Systems* 11(4), 1995, 5-8.

### **Editorial Boards**

- *Journal of Community Informatics*
- *Journal of Digital Information*
- *Journal of Web Engineering*
- *International Journal of Web Engineering and Technology*

### **SERVICE TO PROFESSIONAL SOCIETIES**

#### **ACM SIGWEB**

- *Chairing SIGWEB's Digital Library Effort (currently)*
- *Treasurer 1994-1997*

SIGWEB (known as ACM SIGLINK before 1998) is the ACM's special interest group on hypermedia and the World Wide Web.

### **SERVICE TO THE LOCAL COMMUNITY**

- Boy Scouts, Troop 273, Westfield, NJ
  - \* Assistant Scoutmaster
  - \* Merit Badge Counselor for Disabilities Awareness, Family Life, Personal Management and Scholarship
  - \* Troop Webmaster (until 2004)
- Pi Delta Epsilon (my college fraternity)
  - \* Board of Governors, since 1998
  - \* Webmaster, 2000-2001 (I created the fraternity's Web site)

## **VIII. AWARDS AND RECOGNITION**

### **AWARDS**

#### **Faculty Service to the Cooperative Education Program Award, March 2002**

by NJIT's Career Services Division

#### **Outstanding Professional Development (nominated for 2002, did not receive)**

NJIT's Excellence in Teaching Award



**Best Poster Award (multiple recipients):**

Michael Bieber, "Automating Hypermedia for Decision Support," JOVE Annual Retreat, June 1994

**Conference Outstanding Decision Support Systems Applications and Achievements**

**Award:**

Kimbrough, Steven O., Clark W. Pritchett, Michael P. Bieber and Hemant K. Bhargava, "An Overview of the Coast Guard's KSS Project: DSS Concepts and Technology," *Transactions of DSS-90* (Boston; May 21-23, 1990), TIMS, pages 63-77.

Michael Bieber is on Facebook. Join Facebook to connect with Michael Bieber and others you may know. Facebook gives people the power to share and makes Michael Bieber is on Facebook. Join Facebook to connect with Michael Bieber and others you may know. Facebook gives people the power to share and makes Justin Drew Bieber (/É~biÉbÉ™r/; born March 1, 1994) is a Canadian singer, songwriter and dancer. After talent manager Scooter Braun discovered his YouTube videos covering songs, he was signed to RBMG Records in 2008. Bieber then released his debut EP, My World, in late 2009. It was certified Platinum in the United States. With the EP, Bieber became the first artist to have seven songs from a debut record chart on the US Billboard Hot 100.