

MICHAEL GOLDWEBER

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EDUCATION:

Dartmouth College, Hanover, N.H.
Ph.D. Computer Science: June 1993 1986 - 1990
Thesis: Replication in Highly Available Distributed Systems.
Advisor: Donald B. Johnson, Professor of Computer Science and Mathematics

Dartmouth College, Hanover, N.H.
M.A. Computer Science: June 1993 1986 - 1990

Boston University, Boston, MA.
B.A. (summa cum laude) Mathematics-Computer Science: May 1982 1978 -1982

Boston University, Boston, MA.
B.S.B.A. (summa cum laude) Finance: May 1982 1978 - 1982

Other Education:

W.U.J.S. Institute, Arad, Israel.
Non-degree graduate overseas study program. 1985 - 1986

ACADEMIC EXPERIENCE:

Sabbatical Appointments:

Fall 2003

Visiting Professor of Computing, UNITEC, Auckland, New Zealand. One semester at UNITEC as part of a faculty exchange program. Taught two courses, assisted in the supervision of some master's students and participated as an assessor in UNITEC's professional doctorate program. Also participated in numerous curricular development activities including the development of a new entry level master's course.

Spring 2004

Visiting Researcher in Computer Science, University of Bologna, Bologna, Italy Working with the creators of MPS, designed and developed μ MPS a hardware simulator to support the undergraduate operating systems course and Kaya, a semester-long project based on μ MPS. Also authored the accompanying Student Guide.

Permanent Appointments:**1999-present**

Associate Professor of Computer Science, Xavier University, Cincinnati, Ohio. Teaching responsibilities cover all areas of the undergraduate CS curriculum; primarily focusing on the systems courses (operating systems, database systems, etc.) and the introductory sequence (CS1 – CS3). As one member of a three person program, involved in all aspects of running a successful undergraduate CS major; including extensive curriculum development and the overseeing of mandatory student senior projects. In addition to departmental committee work, perform duties as coach of Xavier's ACM Programming Contest teams.

1994 - 98

Associate Professor of Computer Science, (98-99), Beloit College, Beloit, WI.

Assistant Professor of Computer Science, (94-98). Teaching responsibilities cover all areas of the undergraduate CS curriculum; primarily focusing on the systems courses (operating systems, database systems, etc.) and the introductory sequence (CS1 – CS3). As one member of a two person program, involved in all aspects of running a successful undergraduate CS major; including extensive curriculum development and the overseeing of mandatory student senior theses/research projects. In addition to College wide committee work, perform duties as faculty advisor to a student organization (Am Israel), and coach of Beloit's ACM Programming Contest teams.

1992 - 1994

Assistant Professor of Computer Science, Ithaca College, Ithaca, N.Y. Teaching responsibilities cover all areas of the undergraduate CS curriculum with special emphasis in the areas of operating systems, computer networks and computer literacy. Also involved in the restructuring of the CS curriculum and development of interactive multimedia teaching aids.

1990 - 1992

Visiting Assistant Professor of Computer Science, University of Vermont, Burlington, Vt. Responsibilities included teaching courses for both the undergraduate and graduate programs in the areas of operating systems, distributed systems, computer networks, and data structures/algorithms, as well as supervising masters students. Organized UVM's Virtual Distributed Shared Memory Research Group. Performed additional duties as the faculty advisor to a student organization (The Jewish Action Coalition).

1979 - 1981

Instructor, Boston University/Metropolitan College, Boston, MA. Taught introductory assembler and structured language programming for the university's evening commuter student program (part-time).

1979 - 1981

Teaching Assistant, Boston University, Boston, MA. Graded all course work and provided individualized student assistance for classes ranging from the introductory level, through graduate level operating system design courses (part-time).

INDUSTRY EXPERIENCE:

1984 - 1985

Systems Consultant, Systemation Inc., Cleveland, Ohio. Outside consultant acting as database administrator and lead analyst for the design and implementation of an on-line financial management system, based around a relational database machine at a large international law firm. Duties also included component selection/evaluation, design and implementation of the communications network, and writing of system documentation.

1983 - 1984

DSS/Database consultant, Applied Data Research, Cleveland, Ohio. Technical sales support representative for IBM based systems software vendor, marketing relational database and decision support systems. Responsible for providing technical assistance during the pre-sale phase as well as local support and education/training to existing clients in the south and midwest sectors of the U.S.

1982 - 1983

Account Manager, Ecotran Corp., Cleveland, Ohio. Technical liaison to the client base for a local service bureau offering engineering, relational database and financial forecasting services on UNIVAC and DEC mainframes. Duties involved custom programming, user education and customer support.

1980 - 1982

System Design Consultant, Organizational Dynamics Inc., Burlington, MA. Designed, constructed and maintained an individualized managerial information system; also involved in performance and feasibility evaluations (part-time).

OTHER EXPERIENCE:

1993 - present

Bicycle Tour Leader, BikeCentennial/Adventure Cycling, Beloit College Alumni Bicycle Tours. Leader for small group supported and unsupported bicycle tours. Unsupported tours in the Canadian Rockies and Alaska for BikeCentennial/Adventure Cycling. Created and led supported Inn-to-Inn tours for the Beloit College Alumni Bicycle Tours Program.

PUBLICATIONS:

Texts:

μ MPS Principles of Operation. Michael Goldweber and Michael Goldweber. Web published at: www.cs.xu.edu/uMPS/.

Student Guide to the Kaya Operating System Project. Michael Goldweber and Renzo Davoli. Web published at: www.cs.xu.edu/uMPS/.

Papers at Refereed Conferences:

View-OS: A New Unifying approach Against The Global View Assumption. Ludovico Gardenghi, Michael Goldweber, and Renzo Davoli. To appear in the Proceedings of the 2008 International Conference on Computational Science (ICCS '08).

VDE - An Emulation Environment for Supporting Computer Networking Courses. Michael Goldweber and Renzo Davoli. To appear in the Proceedings of the 13th Annual Conference on Innovation and Technology in Computer Science Education (ITiCSE '08).

Environments for a Networking Laboratory. Morgan Conbere, Michael Erlinger, Renzo Davoli, and Michael Goldweber. Proceedings of the 20th Annual Conference of the National Advisory Committee on Computing Qualifications (NACCQ 2007).

Virtual Square (V^2) in Computer Science Education. Renzo Davoli and Michael Goldweber. Proceedings of the 10th Annual Conference on Innovation and Technology in Computer Science Education (ITiCSE '05) - ACM SIGCSE Bulletin-inroads, volume 37, number 3, 2005.

The Kaya OS project and the μ MPS Hardware Simulator. Michael Goldweber, Renzo Davoli, and Mauro Morsiani. Proceedings of the 10th Annual Conference on Innovation and Technology in Computer Science Education (ITiCSE '05) - ACM SIGCSE Bulletin-inroads, volume 37, number 3, 2005.

Fostering a Creative Interest in Computer Science. Gary Lewandowski, Elizabeth Johnson, and Michael Goldweber. Proceedings of the 36th SIGCSE Technical Symposium on Computer Science Education (SIGCSE '05) - ACM SIGCSE Bulletin-inroads, volume 37, number 1, 2005.

New Directions in Operating Systems Courses Using Hardware Simulators. Renzo Davoli and Michael Goldweber. Proceedings of SCS International Conference on Simulation and Multimedia in Engineering Education (ICSEE'03/WMC'03).

A Road Map for Teaching Introductory Programming Using LEGO Mindstorms Robots. Pamela Lawhead, Constance Bland, David Barnes, Michael Duncan, Michael Goldweber, Ralph Hollingsworth, and Madeleine Schep. Proceedings of the 7th Annual Conference on Integrating Technology into Computer Science Education (ITiCSE '02) - ACM SIGCSE Bulletin-inroads, volume 35, number 2, 2003.

Resources for Instructors of Capstone Courses in Computing. Tony Clear, Frank Young, Michael Goldweber, Paul Leidig, Kirk Scott. Proceedings of the 6th Annual Conference on Integrating Technology into Computer Science Education (ITiCSE '01) - ACM SIGCSE Bulletin-inroads, volume 33, number 4, 2001.

Non-Programming Resources for an Introduction to CS: A collection of resources for the first courses in Computer Science. Joseph Bergin, Myles McNally, Michael Goldweber, Stephen Hartley, Charles Kelemen, Tom Naps, Chris Power. Proceedings of the 5th Annual Conference on Integrating Technology into Computer Science Education (ITiCSE '00) - ACM SIGCSE Bulletin-inroads, volume 33, number 2, 2001.

Developing a Digital Library of Computer Science Teaching Resources. Scott Grissom, Deborah Knox, Elana Cooperman, Wanda Dann, Michael Goldweber, Janet Hartman, Marja Kuittinen, David Mutchler, and Nick Parlante. Proceedings of the 3rd Annual Con-

ference on the Teaching of Computing/3rd Annual Conference on Integrating Technology into Computer Science Education (ITiCSE '98) - ACM SIGCSE Bulletin, volume 30, number 4, 1998.

Historical Perspectives on the Computing Curricula. Michael Goldweber, John Impagliazzo, Iouri A. Bogoiavlenski, A. (Tony) Clear, Gordon Davies, Hans Flack, J. Paul Myers, and Richard Rasala. Working Group Reports and Supplemental Proceedings of the 2nd Annual Conference on Integrating Technology into Computer Science Education Conference, 1997.

An Overview of Visualization: Its Use and Design. Tom Naps, Joe Bergin, Ken Brodli, Michael Goldweber, Ricardo Jimenez-Peris, Sami Khuri, Marta Martinez, Myles McNally, Susan Rodger, and Judith Wilson. Proceedings of the 1st Conference on Integrating Technology into Computer Science Education (ITiCSE '96) - ACM SIGCSE Bulletin, volume 28, number SI, 1996.

Minimizing Access Costs in Replicated Distributed Systems. Michael Goldweber and Donald B. Johnson. Proceedings of the 15th Annual ACM Symposium on Principles of Distributed Computing, 1996.

A Multi-Paradigm Approach to Teaching Computer Science I. John Barr, Michael Goldweber, and Chuck Leska. Proceedings of the 1994 Small College Computing Symposium.

A New Perspective on Teaching Computer Literacy. Michael Goldweber, John Barr, and Chuck Leska. Proceedings of the 25th SIGCSE Technical Symposium on Computer Science Education (SIGCSE '94) - ACM SIGCSE Bulletin, volume 26, 1994.

Posters at Refereed Conferences:

Educational Uses for VDE. Michael Goldweber and Renzo Davoli. 38th SIGCSE Technical Symposium on Computer Science Education (SIGCSE '07).

UMview: View-OS implemented as a System Call Virtual Machine. Renzo Davoli, Michael Goldweber, and Ludovico Gardenghi. 7th USENIX Symposium on Operating Systems Design and Implementation (OSDI '06).

View-OS: A process with a View. Renzo Davoli and Michael Goldweber. Eurosys 2006; Leuven, Belgium, April 2006.

Proposal for an On-Line Computer Science Courseware Review. Michael Goldweber. 1st Conference on Integrating Technology into Computer Science Education (ITiCSE '96). Poster summary appears in conference proceedings and in the SIGCSE Bulletin, volume 28, 1996.

Papers at Editor Reviewed Journals:

Reviewing the SIGCSE Reviewing Process. Amruth Kumar, Michael Goldweber, Patricia Joseph and Paul Wagner. To Appear in SIGCSE Bulletin-inroads; June 2008.

A Report on the Use of HyperTalk in CS1 Within a Liberal Arts Setting. Michael Goldwe-

ber. SIGCSE Bulletin-inroads, volume 31, number 2, 1999.

Technical Reports:

A Bound on Data Availability when Networks Partition. Michael Goldweber and Donald B. Johnson. Technical Report PCS-TR90-145, Dartmouth College, 1990.

A Comparison of Consistency Control Protocols. Michael Goldweber, Donald B. Johnson, and Larry Raab. Technical Report PCS-TR89-141, Dartmouth College, 1989.

Invited Columns:

When Too Much Is Not Enough. Michael Goldweber. Bulletin of Applied Computing and Information Technology, volume 2, number 2, 2004.

Works in Progress:

Environments for a Networking Laboratory. Morgan Conbere, Michael Erlinger, Renzo Davoli, and Michael Goldweber. A longer more detailed version of this paper has been invited to appear in June 2008 volume of the New Zealand Journal of Applied Computing and Information Technology (NZJACIT).

The Virtual Square Framework. Renzo Davoli, Michael Goldweber, and Ludovico Gardenghi. A “summary” article detailing the current state of the V^2 research project is being prepared for submission to the IEEE Transactions on Computers.

EDITORIAL RESPONSIBILITIES:

Proceedings of the 11th Annual SIGCSE Conference on Innovation and Technology in Computer Science Education. Michael Goldweber and Paola Salomoni - Editors.

Proceedings of the 13th Annual SIGCSE Conference on Innovation and Technology in Computer Science Education. Michael Goldweber - Editor.

WORKING GROUPS:

- ITiCSE'02 Working Group on LEGO Mindstorms. Pamela Lawhead and Constance Bland; co-chairs. Aarhus, Denmark. June 22-26, 2002.
- ITiCSE'01 Working Group on Resources for Instructors of Capstone Courses in Computing. Tony Clear and Frank Young; Co-chairs. Canterbury, England. June 24-28, 2001.
- ITiCSE'00 Working Group on Non-Programming Resources for an Introduction to CS. Joe Bergin and Myles McNally; Co-chairs. Helsinki, Finland. July 10-14, 2000.
- ITiCSE'98 Working Group on The Online Computer Science Teaching Center. Scott Grissom and Deborah Knox; Co-chairs. Dublin, Ireland. August 16-21, 1998.
- ITiCSE'97 Working Group on Historical Perspectives in Computing Education. Michael Goldweber and John Impagliazzo; Co-chairs. Uppsala, Sweden. June 1-5, 1997.

- ITiCSE'96 Working Group on Visualization: Its Use and Design. Tom Naps (Chair), Michael Goldweber (Rapporteur). Barcelona, Spain. May 31-June 4, 1996.

WORKSHOPS:

Facilitating Student Written Operating Systems in the Undergraduate OS Course. Michael Goldweber and Renzo Davoli. 36th SIGCSE Technical Symposium on Computer Science Education, 2005.

TUTORIALS:

Enhancing the Operating Systems Course Using the MPS or CHIP Hardware Simulator. Michael Goldweber. CCSC:Midwest '00; October 6-7, 2000.

PANELS/SPECIAL SESSIONS:

The Great European Debate: Scrambling for Students; Our Degrees are Sexier than Yours!. Arnold Pears and Michael Goldweber. To appear in the Proceedings of the 13th Annual Conference on Innovation and Technology in Computer Science Education (ITiCSE '08).

Day One of the Objects-First First Course: What To Do. Joe Bergin - Author and moderator, Mike Clancy, Don Slater, Michael Goldweber, and David Levine. 38th SIGCSE Technical Symposium on Computer Science Education (SIGCSE '07) - ACM SIGCSE Bulletin, volume 39, number 1, 2007.

Do LEGO MindStorms Robots have a Future in CS Education?. Myles McNally - Author and moderator, Michael Goldweber, Barry Fagin, and Frank Klassner. 37th SIGCSE Technical Symposium on Computer Science Education (SIGCSE '06) - ACM SIGCSE Bulletin, volume 38, number 1, 2006.

A Comparison of Different Approaches to the Introductory Programming Course. Michael Goldweber, Author and moderator, Joe Bergin, Raymond Lister, and Myles McNally. 8th Australasian Computing Education Conference (ACE '06) - Volume 52 in the Conferences in Research and Practice in Information Technology Series.

Teaching Polymorphism Early. Joe Bergin - Author and moderator, Michael E. Caspersen, Michael Kölling, and Michael Goldweber. 10th Annual Conference on Innovation and Technology in Computer Science Education (ITiCSE '05) - ACM SIGCSE Bulletin, volume 37, number 3, 2005.

The Relationship Between CS Education Research and the SIGCSE Community. Michael Goldweber - Author and moderator, Martyn Clark, Sally Fincher, and Arnold Pears. 9th Annual Conference on Innovation and Technology in Computer Science Education (ITiCSE '04) - ACM SIGCSE Bulletin, volume 36, number 3, 2005.

The Relationship Between CS Education Research and the SIGCSE Community. Michael Goldweber - Author and moderator, Martyn Clark, and Sally Fincher. 35th SIGCSE Technical Symposium on Computer Science Education (SIGCSE '04) - ACM SIGCSE Bulletin, volume 36, number 1, 2005.

LEGOS, Java, Programming Assignments and CS 1. Pamela Lawhead, Constance Bland, David Barnes, Michaele Duncan, Michael Goldweber, and Madeleine Schep. 34th SIGCSE Technical Symposium on Computer Science Education (SIGCSE '03) - ACM SIGCSE Bulletin, volume 35, number 1, 2004.

The Use of Robots in the Undergraduate Curriculum: Experience Reports. Michael Goldweber - Author and moderator, Clare Congdon, Barry Fagin, Deborah Hwang, and Frank Klassner. 32nd SIGCSE Technical Symposium on Computer Science Education (SIGCSE '01) - ACM SIGCSE Bulletin, volume 33, number 1, 2002.

A Comparison of Operating Systems Courseware. Michael Goldweber - Author and moderator, John Barr, Tracy Camp, John Graham, and Stephen Hartley. 30th SIGCSE Technical Symposium on Computer Science Education (SIGCSE '99) - ACM SIGCSE Bulletin, volume 31, number 1, 2000.

COURSEWARE:

μ MPS. Michael Goldweber, Renzo Davoli, and Mauro Morsiani. A simplification of the MPS hardware simulator targeted towards the undergraduate audience. Used to support undergraduate operating systems development, 2004.

Assist V/370. Michael Goldweber. Enhancement of the Assist V system into an IBM S/370 hardware simulator. Used to support undergraduate operating systems development. Boston University, 1982.

GRANTS:

External Grants:

A Taulbee Report for the Rest of Us. Michael Goldweber. ACM SIGCSE Special Projects Grant Program; 2008.

Development Materials for Using μ MPS in the Undergraduate Curriculum. Michael Goldweber. NSF CCLI-EMD Grant ID #0341003; 2004-2005.

Acquisition of Wireless, Beowulf, and Distributed Computing Clusters. Gary Lewandowski, Michael Goldweber, and Elizabeth Johnson, Co-PI's. NSF MRI/RUI grant #0215836; 2002-2004.

Incorporating Hands-On Exploration Throughout the Computer Science Curriculum. Gary Lewandowski and Elizabeth Johnson, Co-PI's. Michael Goldweber, Senior personnel. NSF CCLI-A&I grant #9952548; 2000-2002.

Internal Grants:

VDE Educational Materials. Michael Goldweber. Xavier University Sabbatical/Faculty Development Grant, Spring 2009.

μ MPS. Michael Goldweber. Xavier University Sabbatical/Faculty Development Grant, Spring 2004.

Using Robots in Introductory Computer Science. Michael Goldweber and Elizabeth John-

son. Xavier University Wheeler Grant, summer 2001.

Access Costs in Distributed Systems. Michael Goldweber. Xavier University Summer Research Fellowship; 2000.

Hypermedia Course Materials Creation Tools. Michael Goldweber. Beloit College Keefer Grant; 1995-1996.

COMMUNITY SERVICE:

Conference Work:

Proceedings Editor. ITiCSE 08 - The 13th Annual Conference on Innovation and Technology in Computer Science Education, Madrid, Spain, June 2008.

Program Co-chair. ITiCSE 06 - The 11th Annual Conference on Innovation and Technology in Computer Science Education, Bologna, Italy, June 2006.

Working Groups Coordinator. ITiCSE 03 - The 8th Annual Conference on Innovation and Technology in Computer Science Education, Thessaloniki, Greece, June 30 – July 2, 2003.

Manuscripts Reviewed For:

SIGCSE, ITiCSE, NECC (National Educational Computing Conferences), and INFOCOM SAICSIT, ComSIS (Computer Science and Information Systems), COMAP, JERIC, ACM Transactions on Computer Systems, Computer Science Education Journal, and the Journal of Information Science

Addison-Wesley, Prentice Hall, Thompson, Wiley and Sons, and McGraw Hill

PROFESSIONAL AFFILIATIONS:

IEEE Computer Society

Association of Computing Machinery (ACM):

general affiliation and the Computer Science Education SIG (SIGCSE)

Honor Societies: Phi Beta Kappa, Beta Gamma Sigma, Pi Mu Epsilon

HONORS & AWARDS:

Chase Manhattan Scholar: 1987-1990.

Degree with Distinction (Mathematics).

Dean's List all semesters (both B.A's).

PERSONAL:

Spouse: Mindy Kay Liebert

Dependents: Eli David Goldweber (DOB: 8/21/95)

Other Dependents: 1 Australian Shepherd ("Sadie")

Location and Year of Birth: Cleveland, Ohio; 1960

Home Address: 9560 Ross Ave., Montgomery, OH 45242, (513) 891-6402

Citizenship: U.S.A.

INTERESTS:

Bicycling, folkdancing, badminton, cross-country skiing, reading