

Abbreviated Curriculum Vitae

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- Current Position** Samuel R. and Marie-Louise Rosenthal Professor of Natural Science and Mathematics, *2001-present*; Professor, *1987-present*; Associate Professor, *1980-1987*; Assistant Professor, *1974-1980* Department Chair, *1981-1983, 1990-1991* Grinnell College, Grinnell, Iowa
- Previous Positions** Senior Lecturer, Department of Computer Sciences, University of Texas at Austin, *Sabbaticals 1988-1989, 1995* Member of Technical Staff (MTS), Bell Telephone Laboratories, Piscataway, New Jersey, *Sabbatical 1980-1981* Lecturer, Department of Mathematics, M. I.T., Cambridge, Mass. *1973-74*
- Education** UNIVERSITY OF IOWA, Iowa City, Iowa
M.S. in Computer Science, *June, 1979*
M.I.T., Cambridge, Mass., Ph.D. in Mathematics, *June, 1973*
Thesis title: Equivariant CW Complexes and Cohomology
Thesis advisor: Professor Franklin P. Peterson
Fellowships: N.S.F. Graduate Fellowship, Woodrow Wilson Fellowship, N.S.F. Graduate Traineeship
WILLIAMS COLLEGE, Williamstown, Mass., A.B., Magna cum Laude with Highest Honors in Mathematics, *June, 1969*
- Publications and Presentations** Author of regular column on "Classroom Issues" for the *SIGCSE Bulletin*
7 books – 5 aimed at CS1 or CS2) plus
with Nell Dale, Abstract Data Types: Specification, Implementation, and Application, Jones and Bartlett, February 1996.
The Limits of Computing, Jones and Bartlett Publishers, 1994 (under revision)
with Weichao Ma and Dorene Mboya, On-line Paper Submission, Paper Reviewing, and Rating Variability, *Proceedings of ITiCSE 2002/SIGCSE Bulletin*, June 2002.
with G. Michael Schneider, A Revised Model Curriculum for a Liberal Arts Degree in Computer Science, *Comm. of the ACM*, Vol. 39, No. 12, Dec. 1996, pp. 85-95.
Over 20 articles spanning computer science education, pedagogy, the state of the computing profession, applications of expert systems and distributed data bases
Over 30 talks and workshops on various computing curriculum topics, including several invited addresses.
- Teaching Experience** Taught full range of courses in both mathematics and computer science at Grinnell College, *1974-1980, 1981-1988, 1989-1995, 1996-present*
Taught Data Struc., Analysis of Prog., Prog. Lang., Abstract Data Types at U. of Texas at Austin, *1988-1989, 1995* and *Summers 1990-1993, 1996*

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| Selected Recent Grants | <p>Author and co-PI for Preparing Future Faculty (PFF) Program grant to a consortium of 5 Iowa Colleges and Universities for the improved training of computer science graduate students for academic careers, 1999-2001.</p> <p>Member, Advisory Committee for NSF CCLI grant to Vassar College for lab materials for experimentation with wireless networking concepts</p> <p>Co-Author and Co-PI, NSF Grant DUE-9451972 and Sony Foundation Grant for <i>In-Class Experiential Learning in Four Fundamental Courses</i>, 1994-1997.</p> <p>Author/Program Director for Grants from Texas Instruments, Noyce Foundation, and Roy J. Carver Charitable Trust to develop and lead workshops for high-school, computer-science teachers, 1991-1999</p> <p>Co-Author, Co-PI, or PI for several grants from NSF and the Culpeper and Keck Foundations for curricular development and laboratories, 1988-1995.</p> <p>Annual grants from the Grinnell College Grant Board for publishing expenses</p> <p>Grants from Little, Brown and Co. for writing textbooks, <i>1984-1986, 1987-1988</i></p> |
| Professional Societies and Affiliations | <p>Association for Computing Machinery (ACM)</p> <p>Special Interest Groups in Computer Science Education (SIGCSE) and Software Engineering (SIGSOFT)</p> <p>Liberal Arts Computer Science Consortium</p> <p>Mathematical Association of America (MAA)</p> <p>Computer Professionals for Social Responsibility (CPSR)</p> <p>Iowa Undergraduate Comp. Sci. Consortium, Founder and member: 1995-present</p> |
| Selected Professional Activities | <p>SIGCSE Chair 2001-present, Secretary/Treasurer, 1993-2001</p> <p>Program Chair, SIGCSE 2000 Symposium; SIGCSE 2002 Symposium Chair</p> <p>Member, CRA Faculty Retention and Recruitment Study Group, 2001-2002</p> <p>Contributor to <i>Computing Curriculum 2001</i> by ACM/IEEE-CS</p> <p>Member of the Task Force on Mathematics and Science, 1999-2000</p> <p>Chair of Pedagogy Focus Group 2, Supporting Courses, 1999-2001</p> <p>Iowa AP Advisory Committee, 1997-present</p> <p>AP CS Advisory Committee, 1995-1996, 1999-2000</p> <p>Member, MAA/ACM/IEEE Task Force on the Teaching of Computer Science within Mathematics Departments, <i>1986-1988</i></p> |
| Consulting Activities | <p>Consultant for the College Board in Math & Computer Science, <i>1983-present</i></p> <p>Consultant for Math/CS Dept., Kalamazoo College, Kalamazoo, MI <i>Fall, 1997</i></p> <p>Outside Reviewer for Evaluation of Either CS Programs or Math/CS Departments: St. Olaf College, Loras College, Dickinson College, Kalamazoo College, Bates College, Hendrix College, University of San Diego, University of Northern Iowa, Juniata College, Wheaton College, Gustavus Adolphus College, Ursinus College, Anderson University</p> <p>Panelist for Review of N. S. F. Proposals, including these programs: CCD, CCD/UFE, ILI, CCLI, and CSEMS</p> <p>Reader and Grading Leader of the Advanced Placement Tests in mathematics and computer science for ETS, <i>1975-1977, 1979-1980, 1982, 1984-1984, 1999</i></p> |
| Reviewing Activities | <p>Reviewer of computer science textbooks for several publishers, including HarperCollins, Brooks/Cole, and Jones and Bartlett.</p> <p>Referee of computer science papers for the ACM <i>Communications</i> and SIGCSE Technical Symposium in Computer Science Education</p> |
| Honors Received | <p>Sigma Xi, elected Associate Member, <i>1972</i>; elected Full Member, <i>1973</i></p> <p>Phi Beta Kappa, elected <i>1967-1968</i></p> <p>Erastus C. Benedict First Prize in Mathematics, <i>1967</i></p> |