

Thomas H. Fuller

Curriculum Vitae

Principia College
Elsah, IL 62028
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EDUCATION

Doctor of Science, Computer Science

Washington University in St. Louis

Dissertation: Supervised Competitive Learning:

A Technology for Pen-based Adaptation in Real Time

Advisor: Takayuki Dan Kimura

Master of Science, Education

Old Dominion University, Norfolk, VA

Thesis: Selective Units: A Practical Way to Individualize

Ninth-grade General Mathematics

Bachelor of Arts, Mathematics

Amherst College, Amherst, MA

Thesis: Algebraic Number Theory and the Fermat Conjecture

EXPERIENCE

ACTING PRESIDENT: PRINCIPIA COLLEGE (2007-2008)

Oversaw all college activities including academics, policy, and events (273 employees, \$32M budget); re-organized college governance structures (Enrollment Management, Executive Committee); hired new leadership team: Dean of Faculty, Dean of Students, Dean of Enrollment Management, College Business Manager, and Athletic Director; spotlighted student recruitment (Jan 2008: 461 students; Sep 2008: 514 students); worked with students, parents, faculty, and administrators; celebrated employee service; inaugurated executive evaluation process; revamped budget process; re-energized quality-improvement process (AQIP); met with Board of Trustees; presided over College Executive Committee; spoke to all-college meetings and external groups; served as final authority on employee termination and student suspension; worked with Elsay town officials on matters of shared interest; met with presidents of neighboring colleges and universities; worked with NCAA/SLIAC on athletics; entertained visiting dignitaries (Melba Beals, Robert Duvall, etc.) at formal dinners with up to sixty guests; presided at Convocation, Baccalaureate, Commencement, and other exercises.

FACULTY: PRINCIPIA COLLEGE (1989 - present)

Served as Unit Head, Math and Natural Sciences (6+ years); Chair, Mathematics and Computer Science Department; College Assessment Coordinator; Faculty Senate President. Hired and evaluated faculty. Managed budgets. Developed curricula. Helped develop plans for current Science Center. Taught math and computer science. Served on Faculty Council, and on many committees: admissions, curriculum, copyright, computer acquisition, institutional assessment, lab management, promotion, scheduling, scholastic, search, and writing advisory board. Helped train and mentor new college faculty. Worked with computer science colleagues in Illinois and Missouri to host the ACM programming contest (1998-2004). Worked with assessment colleagues at SIUE to stimulate institutional assessment and faculty development (1996-1997).

GRAD STUDENT: WASHINGTON UNIVERSITY (1990 - 1994)

Helped write grant proposals. Conducted seminars to teach scientific writing to faculty and graduate students. Designed and wrote expert system derived from NASA CLIPS. Designed and implemented handwriting recognition system on multiple platforms and operating systems. (Overall, have programmed in sixty-five computer languages.)

MANAGER: THE CHRISTIAN SCIENCE PUBLISHING SOCIETY (1986 - 1989)

Managed General Publications (1986-7) and Publisher's Agent product lines (1988-9) and Concord (1986-9). Planned and managed print, audio, video, and computer-based (Concord for DOS and Macintosh) publications. Supervised project managers in the editorial and artistic development of new products. Developed budgets, revenue forecasts, and master publishing plans for senior management.

TRAINER AND MANAGER: BURROUGHS CORPORATION (1983 - 1986)

Taught corporate courses in manufacturing management, information technology, marketing, forecasting, etc. Developed and published courses in many media (classroom, print, audio, video, computer-based training, interactive videodisk). Developed and implemented company-wide system for evaluating professional employees. Developed US-wide forecasting system and training. Worked as corporate volunteer to develop certification testing in manufacturing management, administered by Educational Testing Service in twenty-seven countries.

SPEAKER AND SEMINAR LEADER (1984 - present)

Addressed Principia audiences (Prin Clubs, The 70, US Chapel, Dad's Club, the inaugural Dean's Colloquium) in many locales: Boca Raton, Chicago, Cincinnati, Dallas, Detroit, Elmhurst, Hartford, Kansas City, London, Los Angeles, Orlando, Portland, San Francisco, Seattle, St. Louis, Tampa, Toronto, Washington, D.C., etc. (1991-present).

Taught Principia adult education classes (1988-2014).

Addressed professional audiences in Atlanta, Boston, Dallas, Detroit, Los Angeles, Philadelphia, San Francisco, St. Louis, Toronto, Austria (simultaneous translation), Belgium, England, etc. (1984-present).

Led ten-day tour of manufacturing plants in Japan (1986).

EMPLOYMENT HISTORY

1989 to present	Principia College Elsah, IL 62028
1986 to 1989	The Christian Science Publishing Society One Norway Street Boston, MA 02115
Previous:	Burroughs Corporation (now Unisys) Burroughs Place Detroit, MI 48236
	Portsmouth School Board One High Street Portsmouth, VA 23705

CHURCH SERVICE

Member of First Church of Christ, Scientist — Portsmouth, VA; Birmingham, MI; Derry, NH, and Elsau, IL. First Reader (9 years), Sunday School Teacher (25+ years), Minister to Armed Forces (8 years), Executive Boards (10+ years), Sunday School Superintendent, Board Chairman, President.

Presented paper: Biennial Meeting; panel: Annual Meeting; speaker: Regional Youth Meeting in Washington, D.C.; served on organization and speaker review committee for Healing Goal Meeting in Williamsburg; conducted Christian Science workshop in Tokyo (1986); one of four panel speakers for a special Christian Science lecture in Menlo Park, CA (2005), New Hampshire Visiting Nurse Service Trustee, Peace Haven Association Trustee (2011-present).

Wrote articles for church periodicals. (See “Publications” below.)

PUBLICATIONS

BOOKS

- Supervised Competitive Learning* (dissertation). UMI, 1995.
- Microcomputers in Production and Inventory Management*
Dow Jones-Irwin, 1987.
- Material Requirements Planning* (reprints)
American Production and Inventory Control Society (APICS),
1986, (Volume Editor, also wrote preface and one article).

BOOKLETS

- Supervised Competitive Learning (SCL 3.0) System Manual*. July 1994.
Kumon Machine Project, Washington University in St. Louis.
- Handwritten Character Recognition (HCR) Users' Manual*. October 1991.
Kumon Machine Project, Washington University in St. Louis.
- Quality Education Programs for Master Production Schedulers*
Auerbach, 1985, booklet in their *Manufacturing* series.
- Master Scheduling on Micros*
Auerbach, 1984, booklet in their *Manufacturing* series.

ARTICLES and CHAPTERS

- “Euclid and the ‘math’ of metaphysics.” *Christian Science Journal*, December, 2013.
- “Mary Baker Eddy mentioned Euclid.” JSH-Online podcast, August, 2013.
- “Rays of Comfort.” *Christian Science Sentinel*, April 2, 2012.
- “A full life.” *Christian Science Sentinel*, August 25, 2008.
- “Creation is ever appearing.” *Christian Science Sentinel*, June 16, 2008.
- “Beyond Physics to Metaphysics” interview *Christian Science Sentinel* (broadcast SENR30-529) July 16, 2005.
- “Individuality can't be cloned.” *Christian Science Journal*, October 2001.
- “Supervised Competitive Learning: Pen-based Adaptation in Real Time” in *Intelligent Engineering Systems through Artificial Neural Networks*, vol. 10, eds. C. Dagli et al., New York: ASME Press, 2000. 1051-1056.
- “Subrahmanyam Chandrasekar.” Essay published at Harvard’s web site (<http://xrtpub.harvard.edu/contest/chaness.html>) in support of *NASA's Chandra X-ray Observatory*, October 1999.
- “‘. . . assurance and encouragement’ from *Science and Health*” *Christian Science Journal*, April 1998.
- “Thoughts on the requirement for a *Journal*-advertised Practitioner in a branch church” *Christian Science Journal*, October 1996.
- “Supervised Competitive Learning.” *Journal of Intelligent Material Systems and Structures* 5, (March 1994): 232-246.
- “Energy-Related Feature Abstraction for Handwritten Digit Recognition.” *Proceedings of the Fourth Midwest Artificial Intelligence and Cognitive Science Conference*, May 1992. 71-76.
- “Supervised Competitive Learning, Part I: SCL with Backpropagation Networks.” in *Intelligent Engineering Systems through Artificial Neural Networks*, vol. 2, eds. C. Dagli et al. New York: ASME Press, 1992. 185-190. (with Takayuki Dan Kimura).
- “Handwritten Character Recognition (HCR) Final Project Report.” December 1991. *Kumon Machine Project*, Washington University in St. Louis.
- “The Kumon Approach to Learning Mathematics: An Educator's Perspective.” *Technical Report* WUCS 91-49. Washington University in St. Louis, December 1991.
- “Taking a Stand” interview, *The Herald of Christian Science* (broadcast edition), April 1989 broadcast, July 1989 cassette.
- “Plenty of employment” *Christian Science Sentinel*, March 13, 1989.

Between 1984 and 1990, several other articles and talks were published in various technical and professional publications.

HONORS AND SPECIAL RECOGNITION

Horace Edwin Harper Jr. and Evelyn Wright Harper *Award for Teaching Excellence* 2015
Harry and Margaret Heimer Professor of Mathematics and Computer Science, 2009
Acting President, Principia College, 2007-2008
Edith and Lewis White Distinguished Professor, 2005
Full Professor, 2000
NASA Essay Contest (Top five of thirty thousand entries), 1999
President, Principia College Faculty Senate, 1996-7
Doctoral Marshal (leading the 584 engineering graduates),
Washington University in St. Louis, 1995
Chairman, APICS Certification Subcommittee, 1989

Certified in Data Processing, 1986
APICS “Commitment to Manufacturing Excellence” award, 1985
President's Achievement Award (two, Burroughs Corporation)
APICS Fellow, Production and Inventory Management
Jaycee “Outstanding Young Man” award
Burroughs Legion of Honor (sales award)
Principal's nomination as “Young Educator of the Year”
Amherst Graduation: magna cum laude, Sigma Xi
Amherst Crew, lettered four years, Varsity Captain
Two (different) Admirals' Commendations of a Civilian Worker,
Naval Air Systems Command Representative, Atlantic Fleet

OTHER INTERESTS

Folk singing and guitar.

Ornithology: Led local birding trips. Led Audubon bird surveys 2008-present.

Astronomy: Associate Director of the Principia Astronomical Observatory

Photography: Local awards in Virginia and Michigan. Contributed 30 photographs to the Great Rivers (Illinois) Choral Society Concert, Feb 2007. Principia Dance Production Photographer 2003-present.