

Thomas J. Carter, Ph.D.

Computer Science Dept.
California State University, Stanislaus
Turlock, California, 95382
(209) 667-3175/3185

1721 Arbor Way
Turlock, Calif. 95380
(209) 632-9166
tom@astarte.csustan.edu

- Current Position** Professor/Chair of Computer Science / Cognitive Studies
California State University, Stanislaus
- Education** University of Colorado, Boulder, Colorado (1977-1981)
Ph.D. in Mathematics (1981) - "*Localized Homotopy of the Classical Lie Groups*"

George Washington Univ., Washington, DC (1975-1977) M.A. in Mathematics (1977)

Dartmouth College, Hanover, New Hampshire (1966-1970) B.A. in Philosophy (1970)
- Experience** Computer Science Department, CSU Stanislaus (1982-present, Chair 1993-present)

Santa Fe Institute Complex Systems Summer School (2000-present)

Mathematics Department, CSU Stanislaus (1981-1982)

Instructor, Mathematics Department, University of Colorado (1977-1981)

Graduate Teaching Assistant, Mathematics Department,
George Washington University (1975-1977)

Computing Consulting, Ultrasystems, Inc. (1973-1975)

Administrative Assistant (Computing and Accounting),
Chevy Chase Savings & Loan (1971-1973)
- Research Interests** Nonlinear dynamical systems and chaos, with applications to physiological systems; fractal analysis; adaptive computation and non-procedural programming; neural network simulation; cognitive science; networked and distributed operating systems.
- Recent Courses Taught** Nonlinear Systems and Chaos, Automata Theory, Computability and Formal Languages, Coding and Information Theory, Genetic Algorithms, Artificial Intelligence, Neural Networks, Colloquium in Science, Technology and Human Values, Honors Seminar in the Humanities, Philosophical Aspects of Cognitive Science, Psychopharmacology and Receptors

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- Selected Presentations, Publications, and Conferences**
- "An Introduction to Information Theory and Entropy" (2001-06) Lecture notes series (Santa Fe Institute Complex Systems Summer School) with www release
 - <http://astarte.csustan.edu/~tom/SFI-CSSS/2006/info-lec.pdf>
 - "Evolution of Money Distribution in a Simple Economic Model" (Liang, Carter) (2004) NECSI proceedings.
 - "Shannon, Claude," (2003) Entry in Encyclopedia of Cognitive Science, MacMillan Publishers.
 - "Introduction to Theory of Computation" (2003-2005) Lecture notes series (SFI-CSSS) with www release - <http://astarte.csustan.edu/~tom/SFI-CSSS/2004/computation.pdf>
 - "A Brief Survey of Linear Algebra" (2002-2006) Lecture notes series (SFI-CSSS) with www release - <http://astarte.csustan.edu/~tom/SFI-CSSS/linear-algebra/lin-alg.pdf>
 - "A Brief Introduction to Quantum Computation" (2000-2006) Lecture notes series (SFI-CSSS) with www release - <http://astarte.csustan.edu/~tom/quantum/>
 - "Hallucinogen Flashbacks in theory and practise," (Myers, Watkins, Carter) (1999 – effer Review of Psychedelic Research).
 - "Applications of Nonlinear Dynamical Systems to Sexual Physiology and Systems," (Carter, Myers) (1996 - Invited workshop for International Academy of Sex Research, Rotterdam, Holland).
 - "Hallucinogen Flashbacks: Reality or Myth," (Watkins, Carter, Myers) (1995 - Presentation at Society for Neuroscience, San Diego, CA).
 - "Application of Chaos Theory and Fractal Dimension Analyses to Male Sexual Psychophysiology," (Myers, Carter) (1995 - Presentation at International Academy of Sex Research, Provincetown, MA).
 - "Multimodal Assessment of Body Image: Female and Male Differences," (Myers, Watkins, Carter) (1995 - Presentation at Western Psychological Association, Los Angeles, CA).
 - "Particles and Paradoxes, a Commentary", Research Report, CSWP (1992)
 - Semaphore and monitor tools outside the unix kernel (1986 - 1987)
 - C implementation of Lispkit lisp interpreter (1985-1986)
 - Forth Interpreter (1984-1985)

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- Other** CNS Dean Search Committee (2006)
- Experience** ALS Dean Search Committee (2005)
University Budget Advisory Committee (2002-2005)
ALS Budget and Personnel Committee (1999-2005) (Chair)
Administrative Uses Policy Committee (1998-present)
CMS Project Management Committee (2000-present)
University Facilities Planning Committee (2003-2005)
Honors Program Task Force (1998-1999)
Dean's Advisory Group (1998)
Speaker of the Faculty/Chair Academic Senate (1995-1996 AY)
Speaker Elect (1994-1995 AY).
Strategic Planning Commission (1995-1996)
University Facilities Planning Committee (1995-1996)
Chair, Search Committee, Vice Pres. for Business and Finance (Spring and Fall, 1994).
All Media Institute (1994-1995)
CSUMB Information Processing planning/working group (1994)
Banner Project Management Team (1993-present)
Network Action Group (1994-present)
Chair, University Academic Computing Committee (1986-1994)
Chair, Faculty Budget Advisory Committee (1992-1993)
Chair, search committee for Director of Computing (1987)
University rep. to Statewide Academic Computing Planning Committee (1986-1991)
Faculty mentor program (1987-2000)
Physics department retention, promotion and tenure committee (1986-1987)
Academic Calendar Committee (1986)
Clerk, Academic Senate (1985-1986)
Marketing and Policy department RPT committee (1985-1986)
Chair, University Committee on Committees (1984-1985)
Faculty sponsor, student ACM chapter (1983-1989)
Department representative to Academic Senate (1982-1985)
Department curriculum, faculty search committees (1982-present)
IEEE Computer Dictionary Working Group (Theory section) (1986-present)
- Grants** Information technology grant, 1997.
NSF Laboratory Instrumentation grant, 1989 (co-PI).
Acquired twenty-five unix workstations (\$375,000 value) for campus from Convergent Technologies, Inc. (1986)