Dean E. Dauger

http://Dauger.com/

SUMMARY:
- Advanced skills in creative problem solving and analysis.
- Expert in computer programming and networking, dynamic user-interface design, high-performance and parallel computing, numerical modeling, and visualization.
- Extensive physics background.
- Possesses a talent for creative application of skills across disciplines.

WORK EXPERIENCE:

Dauger Research, Pasadena, CA — January 2001 - Present
Principal - See http://daugerresearch.com/

Project AppleSeed (at Dept. of Physics, Univ. of California), Los Angeles, CA — March 1998 - March 2001
Software Developer - Software development for creating "plug and play" high-performance Power Macintosh parallel computers for physics computation. Worldwide recognition. *

Department Of Physics, University of California, Los Angeles, CA — August 1995 - February 2001
Graduate Researcher - Doctoral research developing a quantum-mechanical multiparticle dynamic simulation for implementation on massively parallel high-performance computers. * Support from LLNL and NSF. Also worked as **Teaching Assistant**.

Jet Propulsion Laboratory, Pasadena, CA — July 1994 - September 1994
Technical Support Engineer - Software development of a graphical user interface in IDL and C for an atmospheric spectrum analysis program.

HSC Software (now MetaCreations), Santa Monica, CA — July 1992 - April 1994
Software Engineer - Product research and development. Designed and developed rapid image processing and dynamic user-interface code. One of two writers of the award-winning software, **Kai's Power Tools v2.0**, rated ♦♦♦♦♦ out of ♦♦♦♦♦ in *MacWorld* and *MacWeek* reviews.

ACCOMPLISHMENTS:

Atom in a Box * — January 1999
Winning entry in the Ninth Educational Software Contest of *Computers In Physics*
Reviewed in *Apple University Arts*, *MacAddict*, *MacHome*, and *Mac Fan* (Japan).

Fresnel Diffraction Explorer * — January 1998
Winning entry in the Eighth Educational Software Contest of *Computers In Physics*

Wunderlich Prize — May 1995
Endowed award recognizing creative achievement in courses or research at Harvey Mudd College.

EDUCATION:

Ph. D. Physics	University of California, Los Angeles	March 2001
M. S. Physics	University of California, Los Angeles	December 1996
B. S. Mathematical Physics	Harvey Mudd College	May 1994

PUBLICATIONS:

"Plasma Physics Calculations on a Parallel Macintosh Cluster" (p. 85-88) in *Physica Scripta* Vol. T84, 2000
"Simulation and study of Fresnel diffraction for arbitrary two-dimensional apertures" (p. 591-604) in the Nov/Dec 1996 issue of *Computers In Physics*
Numerous presentations in international and domestic venues.

ADDITIONAL SKILLS:

Computer Languages - AltiVec, C, C++, Pascal, Fortran 77, Fortran 90, PowerPC Assembly, 680x0 Assembly
Quantum Computation - Passed six-month advanced course at Caltech.
Violin - 19 years experience. Leader of the Caltech-Occidental Symphony's second violin section since 1997.
Piano - 11 years experience. Self-taught.
Amateur Juggling - 8 years experience.

* For more information, see: Dauger.com