

JOHN DALBEY

Curriculum Vitae

Contact Information

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Education

Ph.D., Science and Mathematics Education, 1986
UNIVERSITY of CALIFORNIA, Berkeley

M.S., Computer Science, 1980
CALIFORNIA POLYTECHNIC STATE UNIVERSITY, San Luis Obispo
Concentration in systems and software

B.S., Computer Science, 1976
CALIFORNIA POLYTECHNIC STATE UNIVERSITY, San Luis Obispo

Professional Experience

Teaching

- Lecturer in computer science at Cal Poly for 25 years. Primarily taught Data Structures, OO Design, and Software Engineering.
- Associate Faculty for internet-based distance education course on OO Design.
- Taught community adult education workshop, "Computers without Fear."
- Developed and taught an innovative introductory programming course at Lawrence Hall of Science.

Outdoor Education

- Guided three-week wilderness challenge courses for Outward Bound.
- Rock climbing instructor for Cal Adventures, UC Berkeley.

Research

- Directed a DISA funded project to develop CS1-CS2 lab materials.
- Developed a software engineering "apprentice" model for CS1 instruction.

- Developed an introductory Ada curriculum based on a graphics package.
- Participated in all phases of an NIE study of programming instruction: proposal, research design, implementation, evaluation, and reporting.
- Published in Journal of Educational Computing Research, Journal of Research in Science Teaching, ACM SIGCSE Bulletin, and several conference proceedings.

Computers and Programming

- Maintained and enhanced 20KLOC dispatch room simulator in Java for CalTrans.
- Designed commercial software application, "EASY" scheduling software for Kona Systems.
- Developed "Spider World," a web-based educational programming environment based on Blockly.
- Developed application programs for database management, computer-aided design, communications, statistics, accounting, and education. Knowledgeable in Visual Basic, C++, Java, FORTRAN, Pascal, Ada, Javascript, and Python.
- Developed system programs for security, data recovery, and BIOS interfacing. Knowledge of MS-DOS, Unix, MVS, CMS systems. Coded in assembly language for IBM 370, PDP-11, 8088, and 6502 processors.

Technical Writing

- Wrote effective program and system documentation, user manuals and tutorials, curriculum guides, and teacher and student workbooks.

Management

- Managed rock climbing component of a university recreation program: course scheduling, budgeting, curriculum and policy development, staff supervision and training.