

John W. Shipman
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Experience

New Mexico Tech Computer Center, Socorro, NM, Sep. 1994–present; Applications Specialist.

- Write and organize external and internal documentation.
- Build internal applications.
- Teach informal user classes: Python, XML, software design, database administration.
- Software technology evangelism.

New Mexico Tech, Socorro, NM, Sep. 1987–present; Adjunct Professor of Computer Science. Courses taught include software construction, Cleanroom software development, operating systems, and practica in Python, C, \LaTeX , and \TeX .

Self-employed, dba **Zoological Data Processing**, 1982–present. Software tools for wildlife science; database creation including data entry; book typesetting. Clients include:

- National Audubon Society.
- U. S. Fish & Wildlife Service.
- Institute for Bird Populations, Point Reyes Station, CA.
- New Mexico Department of Game & Fish.
- Cornell Laboratory of Ornithology.
- Point Reyes Bird Observatory.
- Princeton University Press.
- New Mexico Tech Physics Department.

Pen Pal Associates, Los Altos, CA, Jan. 1991–June 1993; Software Engineer. Wrote a scripting language used for rapid development of forms-based applications for the GRiDpad.

Pyramid Technology, Mountain View, CA, June 1981–July 1982; Software Engineer. Instruction set design, processor specification, interactive emulator, Portable C Compiler.

Tandem Computers, Cupertino, CA, Mar. 1975–May 1981; Software Engineer. Employee #17.

- Multi-language symbolic debugger.
- Automated software release and distribution.
- ANSI COBOL runtime library.
- External sort-merge utility.
- Linkage editor.
- Text editor.

- Tandemulator: emulated the hardware for operating system checkout; emulated the operating system for application checkout.

Hewlett-Packard (Data Systems), Cupertino, CA, May 1971–Mar. 1975.

- APL interpreter for the HP 300 engineering workstation.
- BASIC COMPILER/3000.
- BASIC/3000, shipped with the first HP3000.

New Mexico Tech Computer Center, Socorro, NM, June 1966–May 1971.

- Wrote an APL interpreter for the System/360.
- Implemented L⁶, Bell Labs Low Level Linked List Language.
- Automated payroll and registration for the college administration.
- Systems programming, user consulting, service programming.
- First computer and keypunch operator, trained replacements.

Skills

- Lightweight literate programming.
- Cleanroom software development.
- Teaching and public speaking.
- Technical writing, editing, and typesetting.

Publications

- Lightweight Literate Programming: A Documentation Practice. *Technical Communication*, Feb. 2008.
- Numerous publications for the NMT Computer Center; see <http://www.nmt.edu/tcc/help/pubs/index/>.
- An L⁶ Interpreter. CSR 102, New Mexico Tech Computer Science Dept.

Education

- 15 hours coursework toward an M. S. in Computer Science, New Mexico Tech.
- B. S. in Computer Science, 1970, New Mexico Tech.
- Hobbs High School, Hobbs, NM; National Merit Finalist.