COMPUTING SKILLS

My work in SMARTS | EMC | DELL has been all aspects of developing graphical user interface for network management software, in Java and Javascript. Carefully test my changes before committing them, to not introduce new bugs into the product. I am always on the lookout for existing unreported bugs, and also for ways to improve the user interface.

Graphical User Interface (GUI) and WEB site design and development. Usability analysis and user interface design. Educational software research. Technical and end user training and documentation... Effective oral and written communicator, including as "translator" between technical experts and non-technical users, and working with other team members.

Current: Java+*Swing*, JavaScript, AngularJS. Miglayout, Lodash. Windows 2010, Linux. *Prior experience:* Perl, XML, CGI scripting. SGML, Omnimark. Unix. C, MS/DOS, 8086 Assembler. MVS/370 internals, S/370 Assembler, PL/S, TSO, JCL. COBOL, APL.

EMPLOYMENT

SMARTS (System Management Arts) | EMC | DELL, Hopkinton MA1999-2018Senior Software Engineer (2007-2018).Software Engineer (1999-2007)

- Develop User Interface for EMC ScaleIO storage management product (Java+Swing).
- Develop web-based User Interface using AngularJS and other JavaScript technologies.
- Develop computer resource usage and alerting reports in proprietary scripting language for EMC Watch4Net product.
- Develop and maintain "Pure Java" multi-platform (UNIX; Windows) Graphical User Interface (GUI), for SMARTS System Assurance Manager ("SAM") network connectivity / service availability management product.
- Analyze and fix problems from customers and internal Testing groups (QA).

Grolier Educational, Bethel CT

Systems Administrator

- Develop and support SGML-based editorial production processes, including Internet delivery of encyclopedia products, using Perl and AdeptEditor to manage SGML data, and OmniMark to convert SGML to HTML, in mixed UNIX and Windows environment.
- Design and implement web browser-based (HTML user interface) project management system, and photo archive system, using Perl CGI scripts.

Institute for Learning Technologies, Columbia University, New York NY 1996-97

Web Developer

Implement and maintain web site for Digital Library in the Classroom project. Explore
user interface alternatives, using frames and popup auxiliary windows. Extend HTML
functionality with Javascript to include, e.g., "multi-link" hyperlinks (when a user clicks on
a link, they get an annotated menu of resources to go to, instead of going directly to a
single target location). Write Perl scripts to automate generation of HTML pages by
gathering information from other web pages and translating it from other formats.

1997-99

• Webmaster for Institute for Learning Technologies ILTweb. Maintain web site. Respond to user inquiries.

IBM Corporation, Research Division, Yorktown Heights NY1978-96Staff Programmer (1982-96).Senior Associate Programmer (1979-82).Programmer (1978-79)

- Implement pioneering PC-based authoring system (*Handy*) to enable children and noncomputer oriented adults to create multi-media presentations. Use system to research how computers can facilitate creativity, social learning, cooperation and affective growth of children and psychiatric patients. Present to public audiences, *incl.* Maryland Public Television, and IBM System Engineer Symposium (La Hulpe, Belgium).
- Design and implement enhancements to MVS Storage Management, to make 3033MP a viable business product by supporting more than 16 megabytes of real storage. Received 2 awards for this work.
- Design and implement MVS linear data in virtual storage functionality for General Motors Research, to replace TSS function for which IBM had dropped support.
- Design and implement software simulator to enable developers to test code for MVS/XA before availability of hardware.
- Design and implement hypertext text management application for HP-95, to explore potential of personal digital assistants (PDA). (1993)
- Develop and teach S/370 Assembly Language course.
- Initiate ongoing collaboration between IBM Research Exploratory Education Software department and Teachers College Dep't of Communication, Computing & Technology.

EDUCATION

Columbia University, Teachers College

• Ed.D. in Communication in Education (*Dissertation:* <u>Communication:</u> <u>The Social Matrix of</u> <u>Supervision of Psychotherapy</u>, UMI #9511056). M.A. in Computing in Education.

Yale University

• B.A. "Summa cum Laude" in Philosophy. *Phi Beta Kappa*.

PUBLICATION

[Reflecting on technology.] <u>Science and Public Policy</u>, **2007**, <u>34</u>(1).

• Review of Technology Matters: Questions to Live With, David E Nye (2006).

Understanding who we conceive ourselves to be. Science and Public Policy, 2003, 30(5).

• Review of *Publics and Counterpublics*, Michael Warner (2002).

The Envelope as an Art Form: Computer-Aided Images. <u>Leonardo: Journal of the</u> <u>International Society for the Arts, Science and Technology</u>, **1984**, <u>17</u>(1).

• Introduction to my computer graphic art.

1968

1994