

Thomas J. Smith

Objective

My objective is a senior role in software development and system architecture. I am a highly motivated Computer Scientist with many years of experience in software development, design, research, and project management. I can perform independently, as a member of a team or as a "hands on" technical manager to address software design, development, and deployment projects. I communicate well, giving numerous presentations at conferences, customer meetings, and briefings.

Professional Highlights

- Designed and developed a business forms and documents management system. System required integration of several Internet technologies including XML, XSL, XHTML, JavaScript, Java and Java Servlet programming. The system required knowledge of Apache web server technologies, the Tomcat servlet engine, and the Cocoon document management system.
- Project manager for a \$5M project from the U.S. Department of Education. Designed and directed 5 software engineers in the development of a 3-tier Java Internet Portal for K12 educators in the 4-state region of Delaware, Maryland, New Jersey, and Pennsylvania.
- Project Manager of a group of 3 Managers and 25 software engineers in development of a common software development environment for the Department of Defense STARS program.
- Conceived and developed Requirements Management software tool to support accurate requirements traceability throughout a development project.
- Managed a group in development of a large-scale banking system in the U.K. and Prague, Czech Republic.
- Developed techniques for extracting design from legacy source code. Employed these techniques in the reengineering of a large banking system and a child welfare database system.
- Performed basic research into a number of areas, including software development techniques, user interface techniques, and Internet-based control of 3-D graphics.

2001 – Present

Self Employed Software & Internet Technologies Consultant

Work History

Designed and developed a business forms and documents management system. System required elements of multiple Internet technologies including XML, XSL, XSLT, Formatted Objects (FOP), Java Servlets, JavaScript, XHTML, Apache Web server, Tomcat servlet engine, and Cocoon, a document management core system from Apache. I

Sperry/Unisys Liaison to Microelectronics and Computer Technology Corporation.

- Liaison and technology transfer between MCC (Microelectronics and Computer Technology Corp.) and Sperry/Unisys software development groups. Member of Technical Staff engaged in research and development of software engineering environments. I used Common Lisp, C/C++, UNIX, X Windows, Perl, and several SQL database technologies.

Education

- **M.S. Engineering, 2001**, University of Pennsylvania, Philadelphia, PA
- **M.B.A, 1979**, University of St. Thomas St. Paul, MN
- **M.S. Computer Science, 1967**, University of Iowa, Iowa City, IA
- **B.A. Mathematics, 1965**, University of Iowa, Iowa City, IA

Technical experience

Programming Languages

- Internet, Java, JavaScript, HTML, Perl, Python, VRML, XML, XSL, XSLT, XHTML.
- C++, C, embedded systems, APL, Fortran, Lisp, Visual Basic, Word Basic, C Shell, Bourne Shell, Korn Shell, Tk/Tcl, Cobol, ML

Programming Systems

- UNIX: Sun OS, IRIX, Linux, X Window System.
- Windows 95, NT,200, XP, DOS
- Database: SQL, Ingres, Oracle, Access.
- Palm OS 3 and greater.

Program Design & Development

- Structured Analysis/Structured Design, OO design, Requirements Management.
- Design recovery, Legacy software system analysis,
- Client/Server programming, sockets, http and other protocols.

Internet Experience

- Languages: Java, JavaScript, Perl, Python, Tk/Tcl, VRML, XML, XSL.
- Apache Web Server, Tomcat, Cocoon.
- E-commerce systems