

Paul E. Kimball, Principal Consultant

Interface Associates
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SPECIALTIES

Information Technology management, training and software development services. Project management, software architectural design, development, troubleshooting and porting, especially in distributed UNIX environments. Strengths include XML, UML, Web Services, Object-oriented design, Java, C/C++, CORBA, distributed systems, UNIX, X/Motif, user interface design.

EXPERIENCE

1993-pres. INTERFACE ASSOCIATES

Founder and Principal Consultant

Developed courseware covering XML programming, Web services, UML and OOAD, KornShell programming, UNIX commands and utilities, X/Motif, CORBA (C++ and Java), distributed systems. Author of "The X Toolkit Cookbook", Prentice Hall, 1995. Teaching experience also includes advanced C, C++ and Java, Enterprise Java Beans, JSP, user interface design, debugging, etc. Implemented user interfaces and messaging protocols for commercial CAD products on Windows NT, UNIX and OpenVMS. Ported graphical development tools and libraries to 64-bit UNIX systems (C++, Motif, InterViews code).

1984-1993 DIGITAL EQUIPMENT CORPORATION

1990 Manager of Technical Support, Independent Software Vendor Group

Managed 9 software engineers. Responsible for budgets, hiring, assignments, training, capital plans, procedures. Assisted partners in porting large software products (primarily C, C++ and FORTRAN) to Alpha AXP, MIPS, VAX, OSF/1, UNIX and OpenVMS systems. Developed and coordinated support plans for new product and service introductions. Senior backup engineer for west coast technical issues.

1988 Group Consultant, Independent Software Vendor Group

Prepared operations plan and managed help desk. Lead engineer for "X", Motif, DECwindows, OPEN LOOK, UIS and other graphics technologies. Assisted developers in writing and troubleshooting graphics applications in C and FORTRAN on UNIX and VMS systems. Conducted technology studies and special porting projects. Mentored junior and senior engineering staff.

1986 Worksystems Consultant, Western Area Software Services.

Area support engineer for Workstations and graphics technologies. Provided technical support to district software offices and US Worksystems Sales. Analyzed and debugged customer graphics software. Developed sales and technical strategies; presented to customers and internal groups. Liaison between field software organization and worksystems engineering. Conducted training classes for sales and software services ("Introduction to Computer Graphics", "VAXstation Programming", "Programming with DECwindows/X11").

1984 **Marketing Specialist/Sales Executive, Application Center for Technology**
Regional presales engineer for Mechanical CAD systems, workstations. Provided technical consulting for OEMs. Analyzed C, Ada and FORTRAN code and conducted benchmarks on third-party software. Conducted sales and customer training, presentations, demos. Planned and supported shows, seminars, product announcements.

1978-1984 **ROCKWELL INTERNATIONAL CORPORATION**

1982 **Computer-Aided Design Specialist, Corporate IT Division**
Benchmarked and evaluated computer-aided design and manufacturing systems; made recommendations for new installations and upgrades. Reviewed CAD plans and appropriations. Developed database translation software and ComputerVision macros and utilities. Ported graphics and analysis applications to VAX/VMS and IBM MVS/VS2. Managed corporate office CAD system (ComputerVision CADD5 4.0) and developed training courses for users.

1980 **Project Manager, Interactive Computer-Aided Analysis and Design**
Developed CAD systems for spacecraft preliminary design and analysis, using FORTRAN on VAX/VMS and other systems. Prepared project plans and functional specifications for hardware and software systems. Managed implementation including programming, budget (\$350K/yr), facilities, and research. Prepared and delivered internal and government reports/presentations. Developed training courses for users.

1978 **Designer/Stress Analyst, Shuttle Orbiter Division**
Performed conceptual layout and analysis of space transportation systems. Designed/analyzed fibrous composite structures for NASA technology programs. Wrote custom analysis programs in FORTRAN and HPL. Developed finite-element models of structures and thermal protection systems. Developed stress and acoustic test plans and analysis models. Prepared R&D proposals and reports. Worked with laboratory and manufacturing operations to develop test fixtures and models. Developed ComputerVision CGL macros and utilities. Instructor, ComputerVision CADD5 3.0 system.

1976-1977 **UNDERGRADUATE EXPERIENCE**

Mechanical engineer, MIT Innovation Center/MIT UROP Program

Designed and fabricated vacuum-molded reflectors and structural components for infrared audio transmission project. Developed and fabricated thread-winding machine prototype.

OTHER TEACHING EXPERIENCE

1992-1996 **Instructor, University of California at Santa Cruz Extension**
Courses: "Application of Principles and Methodologies in Graphical UI Design"

1988-Pres **Tutorial Instructor - Conferences and symposia**
Object World, USENIX, UniForum, OpenForum, Xhibition, DECUS, UKUUG, X World, National Technological University. Courses: "Building CORBA objects with Java", "Programming with the X Toolkit", "Programming with X and Motif", "S/W Administration for Large X Networks", "Advanced Graphics Effects and Color Programming", "Debugging X"

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Courses: "Effective Presentations", "Computers for Management"

EDUCATION

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Thesis: "A Finite-Difference Solution for Non-Linear Earthquake Waves in Layered Media".
Simulations in FORTRAN on IBM S/360.
- 1977 **Massachusetts Institute of Technology - BS Mechanical Engineering.**
Thesis: "A Raft-Mounted Watermill for Electric Power Generation". Luis DeFlorez Design
Award. Simulations in FORTRAN on Interdata M70.

PUBLICATIONS AND PAPERS

- 1995 **Book, "The X Toolkit Cookbook"**
998pp. c. 1995 Prentice Hall, ISBN 0-13-973132-6
- 1991 **UniForum Technical Conference, Dallas**
"Porting between OPEN LOOK and OSF/Motif GUIs" (reprinted in Datapro Reports on UNIX
Systems and Software, 1991)
- 1991 **Winter USENIX Conference, Invited Speaker, Dallas**
"Debugging X and X Toolkit Applications"

COMPUTER SKILLS

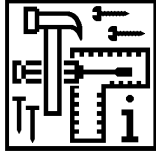
- Hardware: Intel x86, Sun SPARC, DEC Alpha (RISC), DECstation (MIPS RISC), DEC VAX, IBM 3xx/30xx, CV
CGP200, others.
- Systems: UNIX and variants (SunOS/Solaris/Ultrix/HP-UX/AIX/Linux) - 16 yrs, Open VMS - 16 yrs, MS/
DOS - 5 yrs, Windows 95/98/ME - 5 yrs, Windows NT/2000/XP - 9 yrs, OSF/1 - 2 yrs, MVS/VS2
with TSO - 6 yrs, CGOS - 4 yrs, others.
- Web services: XML, XSLT, XML Schema, DTD, HTML with CSS, JavaScript, Enterprise Java Beans (EJB), Java
Server pages (JSP), servlets, Apache, J2EE
- Languages: Java - 8 yrs, C++/C - 15 yrs, FORTRAN - 13 yrs, BASIC - 2 yrs, JCL, DCL, UNIX shells, HPGL.
- Utilities: Sun Forte; Borland JBuilder; Microsoft Word, Excel, Works, Visual C++; XVT toolkit; X/Motif,
OPEN LOOK, UIS, GKS, PHIGS; TCP/IP, DECnet; CMS/MMS, sccs, FrameMaker, WordPerfect,
DECwrite, Quicken, many others.
- CAD Systems: PV/PRO, CADAM, CATIA, ComputerVision 3.0 and 4.0, EUCLID, ANVIL 4000, Palette,
AutoCAD, NASTRAN, ANSYS, ASKA, etc.

INTERESTS

Music, Glassblowing, Mechanical calculators, Astronomy, Language, Literature, Photography

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