# JEFFREY L COPELAND

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## Software Developer & Project Manager

Highly-versatile developer & project management professional demonstrating a broad-based skillset and experience foundation having worked on a wide range of projects as developer, tester, and manager; provides understanding, knowledge and overall performance to a wide variety of projects and teams. Experienced developer in Unix and Windows environments in multiple languages. Able to work both independently and in highly-interactive teams. Supports open communication, collaboration and a sense of humor. Track record of delivering end-to-end, on-time, on budget positive outcomes. Exhibits curiosity and is tenacious in attacking interesting and challenging issues, never satisfied until the final resolution.

# **Core Expertise**

Project Planning / Development / Deployment Agile Methodologies / Scrum Practices Project Specifications / Definition Team Mentoring Internationalization / Localization Release Management Operating system & application development Strategic Planning / Evaluation

# Systems, Languages, Tools

- Unix (Linux, Solaris, HP-UX, AIX), Windows
- C, C++, C#; Perl, Python; working knowledge of others
- Web languages such as HTML, XML, CSS, Javascript
- Printer and typesetting markup languages, such as PostScript, RTF, TeX, troff, EPUB

# **Highlighted Career Contributions**

- Built compiler for embedded SQL resulting in multiple patent applications
- Developed internationalized versions of Unix at multiple companies
- Experience with Windows kernel and device drivers
- Built test plans and automated tests for operating systems and applications

# **Professional Experience**

#### **Publisher and Chief Technical Officer**

Bywater Press, Bellingham, Washington

- Continued small press, which I founded in 2014, helping independent authors publish their work through print-on-demand channels.
- Built software to convert from Microsoft Word and other sources to print-ready PDF and EPUB files. Designed both print and electronic books. Edited and prepared source material.

11/2016-present

RTF, TeX, troff, EPUB

#### **Senior Program Manager**

Spacelabs Healthcare, Snoqualmie, Washington

- Lead successful re-engineering of Spacelabs' XprezzNet connectivity software, which aggregates data from bedside monitors and telemetry devices into upstream medical data systems. XprezzNet saw increased deployment to environments including operating rooms and neonatal intensive care units.
- Managed multiple releases of Spacelabs' flagship Xhibit 48-patient central monitoring platform. This • included early work on a new variant to support smaller groups of patients locally rather than centrally.
- Prepared FDA-required documentation for multiple releases of these and other products.
- Lead the support effort for third-party developers building software on top of Spacelabs' medical data systems.

#### Independent Consultant

- The Sullivan Group: Developing validation and editing tools for XML-based electronic health record system.
- Bywater Press: Prepared pre-press software and editing tools for independent authors to self-publish through sites such as Barnes & Noble and Amazon.
- World Science Fiction Society: Major revision of software package which I originally developed for WSFS to administer the Hugo Awards.

#### **Test Manager / Test Program Manager**

Zillow, Seattle, Washington

- Leveraged program management skills, leading a test team across many of Zillow's product areas, including mobile applications, mortgage, school information, home value tracking.
- Active participant in sprint planning and project management for test teams. Worked on release management (including process improvements) across the company.
- Coached individuals and teams, improving performance and doubling automated test production. •
- Provided individual contributions in areas of home page, schools, home values, home improvement, and occasionally mortgage. Developed test plans and wrote and maintained automated tests.

#### **Senior Program Manager**

Microsoft, Redmond, Washington

- Managed 7 releases of Windows Driver Frameworks end-to-end across 3 major Windows releases, • delivering each on time with full features. (WDF is a device driver platform independent of device class and operating system.)
- Planned future releases of Windows and wrote white papers for customers and management. Coordinated inside and outside the Frameworks team, solving cross-team issues for each release.
- Evangelized outside the company, managing relationships with external along with internal customers. Presented at Windows Hardware Engineering Conferences and Driver Developer Conferences.

#### Software Design Engineer

Microsoft, Redmond, Washington

- Continued development of Interix (see Softway Systems, below) for Microsoft, including integration into Microsoft's existing Services for Unix (later Subsystem for Unix Applications) product.
- Principal developer for Interix internationalization features, including architecture, design and prototype implementation. Most of the changes between SFU 3.0 and SFU 3.5 were a direct result of my work.
- Provided expert guidance and assistance to developers in Hyderabad and Tokyo.

# 4/2004-8/2012

11/2012-2/2014

4/2014-1/2015

2/2015-11/2016

9/1999-4/2004

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### Senior Software Developer

#### Softway Systems, Fort Collins, Colorado

- Architect and lead developer for end-to-end internationalization on Softway's Interix product, providing internationalized versions of POSIX.1 libraries, and POSIX.2 utilities; improved overall standards conformance for Interix.
- Developed a pre-processor for embedded structured query language (ESQL), converting C with SQL into standard ODBC library calls; resulted in patent applications filed by Microsoft.

# **Senior Member of the Technical Staff and Interim Manager of the Languages Group** 11/1994–7/1997 *QMS, Inc (now a part of Konica-Minolta), Boulder, Colorado*

- Represented QMS in the Printer Working Group (PWG) and developed an Internet Printing Protocol, providing a standard for network printer support.
- Coded Hewlett-Packard Printer Control Language emulations for QMS printers.
- Managed personnel, strategic planning, budget, and internal customer relationships. Guided rolling releases across different printer hardware through customer-driven requirements. Essentially, these were early instances of Agile development and eXtreme Programming.

# Additional / Notable Experiences

- Provided internationalization expertise for a development team producing Asian and European versions of their production-line configuration software.
- Managed a team of 25 developing libraries and commands to comply with POSIX.1 and .2 standards. Later managed operating system feature and standards testing on the same project.
- Developed multiple typesetting systems and printer drivers.
- Designed features for a workstation operating system to handle middle-eastern and oriental languages, which included solving problems of large character sets and languages read left-to-right, right-to-left, and top-to-bottom.
- Coached and mentored a number of people on presentation and leadership skills through Toastmasters International.
- Volunteer technical coach at Bellingham Public Library.

# Patents & Selected Publications

Jeffrey L Copeland, Donn S Terry, Jason D Zions: ``Linktime Recognition of Alternative Implementations of Programmed Functionality," US Patent 7,757,225, issued July 13, 2010.

Jeffrey Copeland and Jeffrey S Haemer: monthly column in Server/Workstation Expert and RS/Magazine, 1992 through 2001, covering Internationalization, the POSIX standards, Literate Programming, and Tools. For selected columns, software and later web-only articles, see *http://alumni.caltech.edu/~copeland/work*.

# **Education, Certifications, Memberships**

California Institute of Technology, Pasadena, California: Bachelor of Science in Engineering (Computer Science); Undergraduate Research Assistant, Undergraduate Teaching Assistant.

Additional coursework at University of California at Los Angeles, University of North Carolina at Chapel Hill, University of Colorado at Boulder.

Project Management Institute: Project Management Professional certificate.

Scrum Alliance: Certified Scrum Master.

Toastmasters International: Distinguished Toastmaster award.

Member of the Project Management Institute, Scrum Alliance, Usenix Association, and the TeX Users Group.