Douglas E. Warren

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**SKILLS SUMMARY**

* Demonstrated ability to quickly adopt and employ different workplace practices (Agile, Waterfall), tools and platforms (MS Windows, iOS, Android. Web Browsers: Firefox, Chrome, Safari).
* Diverse experience with Verification and Validation Planning, Test strategies, test writing, test execution, test result collation and reporting within a regulated environment (FDA, Medical Devices).
* Excellent skills with determining Software test toolset: evaluation, selection, usage criteria and timeliness of implementation.
* Software development: Visual Studio 2015, Perforce, Git (SourceTree, GitLab), Clearcase, Eclipse, shell scripting.
* Software Test Automation: Selenium, TestComplete, Squish (Qt applications), Labview, Homegrown tools using Javascript, C++, C#.
* Operating Systems: Windows, XP – 8.1, Linux (Redhat Enterprise, yacto custom/embedded).
* Virtualization: Oracle VirtualBox.
* PCI (Payment Card Industry) security compliance.

**EXPERIENCE**

**NAVIS –** Bend, Oregon

**SOFTWARE QA ENGINEER (3/2015 – Present)**

NAVIS delivers high-performance hospitality sales and marketing solutions that create and convert more demand across all channels, resulting in dramatic growth in revenue and profit.

* **PCI** compliance, requirements, application to service conversions. Hardening interfaces against SQL injection vulnerabilities. Working with IT System Administration and DBA to implement appropriate levels of security.
* **TopShelf** (Windows Service wrappers)
* **Test Automation** Web page regression testing via Selenium (Python/C#), JMeter for endpoint verification and load testing.
* **Cross system verification** SQL Server (SSMS), Mongo (Robomongo), Graylog/Syslog
* **Build & Deployment automation** TeamCity/Artifactory

**CARDINAL PEAK (Contract)– Lafayette, Colorado**

**SOFTWARE QA ENGINEER (11/2014 – 03/2015)**

Majority of time performed verification and validation of applications to test Streaming media for satellite and cable industry.

Build, deploy & test application to thoroughly verify HLS streaming to multiple devices.

Testing scenarios of content delivery to verify compatibility across multiple consuming devices: Android (tablets & phones), iOS, macOS, Windows.

**AUTODESK–** Boulder, Colorado

**SR. SOFTWARE QA ENGINEER (11/2013 – 08/2014)**

Formit 360 is a seamless and collaborative multi-platform (Web, iOS, Android and Windows Desktop) 3D architectural design toolset. As the QA Engineer in a team of 25+ geographically dispersed developers, my responsibilities are unit and workflow testing of new features, maintenance of shipped functionality, documentation of testing and testing practices, resolving customer issues, managing defects, creation, execution and management of automated API tests.

* Web application testing (Chrome, Firefox, Safari), Autodesk Formit 360 Web, Manual & Automation using TestComplete 10 when and where appropriate.
* Android application testing, Autodesk Formit 360 Android, Manual Testing.
* iOS (iPad) application testing, Autodesk Formit 360 iOS, Manual Testing.
* API (JavaScript to C++) 3D Graphics API testing, Automated, Internal tool, Coverage Analysis to verify coverage effectiveness of testing effort. Use of Visual Studio 2013, cmake.
* Agile methodology, daily scrums, Sprint planning & issue tracking via Jira toolset.
* Real-time, seamless multi-platform Client application collaboration testing.

**COVIDIEN CORPORATION, Surgical Solutions/Energy (Electro surgery) –** Boulder, Colorado

**SOFTWARE VERIFICATION ENGINEER (8/2010 to 10/2013)**

* Software R&D Integration Test and Test Automation Lead.
* Creating automated Integration and Regression Testing system for Next-Generation product and the ForceTriad Generator.
* Responsible for Integration testing and resource for Software development Unit testing practices and principles.
* Reviewer and Auditor for requirements, design and code changes.
* Close collaboration with manufacturing with device validation protocols and process.
* Develop and review research laboratory device experiments and trial documentation.
* Instructing and mentoring Software developers on Testing techniques and strategies.
* Redhat Linux (Intel 64 bit) & cross compilation to 32 bit embedded medical device Linux environment (Intel Atom). Additional dual soft-core Microblaze FPGA functional verification.
* Qt and Java Automated software verification: Distributed GUI and custom internal data structure automated verification (progressive regression and continuous integration testing).
* Update, build, burn, distribute and document Software Releases for Agile development and integration testing.

**BAXA CORPORATION (**[**www.baxa.com**](http://www.baxa.com)**) –** Englewood, Colorado (A Medical Device Company)

**SOFTWARE QUALITY ENGINEER** (4/2004 – 8/2010)

*Note: Baxa was acquired by Baxter in 2011.*

The following bullet items are some of the responsibilities fulfilled:

* Quality and Validation Lead for creation, review, execution and tracing of Software, Firmware and System Verification Plans, Protocols and results using an IEC-62304 based Development Model. Employ additional techniques such as Exploratory/Session-based and pairwise testing where appropriate for Class I/II Medical Devices.
* Test Automation: Lead all Product Test Automation activities: Requirements for automation, acquisition and installation of Automation tools. Trained development, test and contract personnel on the toolset. Automation Toolset used: TestComplete/TestExecute.
* Creation, management and execution of Customer on-site Validation Protocols of product language translations: French, German and Italian languages.
* Lead post FDA Warning Letter (Form FDA 483) DHF remediation projects focused on Software Design Verification and Validation documentation (process, procedures and implementation specific templates).
* Lead Quality Assurance input and activities on project Design Planning, Change, Inputs, Outputs, Verification, Validation, and Transfer. For Process Automation projects, key contributor for V&V planning, protocols review and execution in association with pFMEA, Computer Validation, IQ, OQ and PQ.
* Creator and Reviewer of Product Risk Assessment and Management: Fault Tree Analysis, Software Risk Analysis.
* Audit Project DHF documentation for conformance to company QMS procedures and report findings.
* Key contributor to continuous improvement of the Quality Manual Processes, Procedures/Work Instructions and Templates (FDA Regulations 21CFR11 Electronic Signatures and Records, 21CFR820.30 Design Controls).
* Lead vendor and on-site Software and System Validation tasks for Manufacturing Process Automation in concert with Quality and Process Engineers.

**GENERAL ELECTRIC –** Corvallis, Oregon

**LEAD SYSTEMS TEST ENGINEER** (Contract: 1/2004 – 3/2004)

Video Systems Group

* Created and documented cross-functional systems testing group, processes and procedures.
* Lead Process Improvement discovery, presentation and implementation.
* Improved the documented New Product Introduction Process.
* Lead coordinated effort in systems testing throughout the Video Systems Group.
* Mentored test engineers and technicians on test creation, execution and reporting.

**AGILENT TECHNOLOGIES, INC**. – Colorado Springs, Colorado

**SOFTWARE QUALITY ENGINEER** (4/2000 – 9/2002)

Network Systems Test Division

* Lead productivity tools investigation, qualification and installation: (UML and Java Development)
* Lead code test tool investigations: Bounds Checker, Purify and PureCoverage for C++, JProbe for Java.
* Leader in definition and content of project quality plans consisting of: schedules, process, process improvement, resource allocation, verification and validation activities, automated and manual black box and white box testing.
* Managed a group of 5 software testers in test planning, test suite creation and testing techniques.
* Lead defect tracking and resolution project teams. Produced both project and process metrics for management review and process improvement feedback. Conducted post-project reviews.
* Managed, maintained and enhanced a data and voice network test lab.
* Created Java applet to discover and store SNMP agents to be used in a network analysis Java based application.

**TEKTRONIX, INC**. – Redmond Oregon and Beaverton, Oregon

**SOFTWARE DESIGN ENGINEER** (7/94 – 4/2000)

Oscilloscope Business Unit

Used MS Visual C++ with Visual Source Safe to create User Interface Components for Tektronix Oscilloscopes and Logic Analyzers.

Performance Oscilloscope & Cable Network Analyzer Product Lines

Assured consistent SEI CMM Level III process and ISO 9001 certification. Lead process improvement projects: System and Software Requirements definition, application testing techniques, and SQA activities. Gathered and presented product and process metrics. Generated software quality plans, testing schedules, regression and stress tests, software release criteria, and quality records. Mentored software engineers in process interpretation and application.

Used Clearcase for building and merging software versions and documentation.

**FORD MOTOR COMPANY** - Dearborn, Michigan

**COMPUTER APPLICATIONS ENGINEER** (2/93 - 7/94)

Electric Vehicle Development Laboratory

Developed PC-based graphical user interface software tools (using LabView and LabWindows) that were used by electric vehicle engineering staff for analysis of vehicle local area network and subsystems. The analysis packages were used to verify sub-system operation, network performance and vehicle characteristics. This software package was used on three different types of Ford electric vehicles.

**EDUCATION**

**OREGON STATE UNIVERSITY** – B.S.C.S. 1992, Corvallis, Oregon