

SR. SOFTWARE TEST TOOLS DEVELOPMENT ENGINEER

Qualifications

- Operating System: Android, Windows, Linux, Solaris, HPPA, AIX, iOS
- Programming: C/C++, Qt, Java, JavaFX, Android SDK, GNU tool chain (gcc/g++, gdb, vargrind, efence, make), Shell, Perl, Python, SystemC, VHDL, Verilog
- Embedded System Protocols: Modbus, Climate Control II (Honeywell Enviracom), Inter Process Protocol 3 (Trane's HVAC System Local Bus Control Protocol)
- Computational Fluid Dynamic (CFD) Simulation Tools: PowerFlow, PowerCASE, SimVision
- EDA Tools: Cadence IUS (NC-Vhdl, NCVlog, NCVerilog, Irun, SimVision, NC-SystemC), PSL, IFV(Incisive Formal Verification), IFH(Incisive Formal Hybrid),
- IDE: Android Studio(Android SDK), Qt Creator(C++, Qt), Eclipse(Java, JavaFX), JavaFX Scene Builder 2.0 (JavaFX)
- Database: MySQL
- Bug Tracking Tool: Bugzilla, Gnats
- Regression Test Management Tool: Qmtest, Testlink
- Configuration Management Tool: Perforce, Git, Clearcase, VCC, Perforce.
- Other Supporting Tools: Windchill, Integrity, Sharepoint OS X, Android, iOS, Linux.
- Tested mobile apps on iPad, iPod, Iphone, Android, and linux operating systems. (HVAC, Audio, Video, Lighting control systems through wi-fi based mobile devices, apple TV, OSD)
- Selenium 2 (Webdriver with Python binding), Python
- Device logging with Android Debug Bridge
- Researched Appium and Eggplant for mobile app test automation.
- Testlink, Git
- Software/Hardware configuration between mobile devices and control boxes
- EXA Corporation, Burlington, MA (www.exa.com) - CFD Physics 3D Modeling Simulation Software
- SQA Engineer
- May 2011 - Dec 2013
- Operating Systems: Red Hat (64bit/32bit), Windows 7 (64bit/32bit), Vista (64bit/32bit), Windows XP (64bit/32bit), HP-UX, Solaris.
- Programming/Script Languages Used at Work: C++, Qt, Python, Shell
- QA Project Lead for PowerFLOW/PowerCASE (CFD Physics 3D Modeling for Vehicles or Machines) product.
- Design and execute application software test plans. Have the test plans get reviewed and updated with technical feedback.

Work Experience

06/2014 to Current

Sr. Software Test Tools Development Engineer Oracle 1/4 TX

- Software development and test engineer with sixteen years of experience in software development process.
- Excellent knowledge of software programming, debugging, and testing.
- Admin level knowledge of Linux system.
- Extensive programming skills in C/C++, Qt, Android, Java, JavaFX, Python, VHDL, Verilog, SystemC, and shell script languages.

01/2014 to 06/2014

Software Test Automation Engineer Contractor SAVANT Systems 1/4 San Antonio , STATE

- Wi-Fi based mobile application for Home/Commercial System Automation Created automated regression suite infrastructure from scratch.

05/2009 to 05/2011

Localization SQA Engineering freelance engineer SMA Solar Technology

- Provide technical guidance and support to members of the SQA team on the content of test plans, and the design, configuration, and application of test environments and tools required for application testing.
- Execute software verification according to the test plan.
- File bug reports and track the issues until the bug gets resolved (bug report system: gnats) Perform test automation in Python (90%) and Shell (10%) Maintain regression suite: analyzing test failures, filing bug reports, regold tests, merging regression suite on a need basis.
- Manage and run cronjobs (running regression test, generating statistical test data periodically) on a daily basis.
- Review various technical documents and provide comments.
- Attend various technical meetings within the development team.
- Perform root cause analysis (RCA) and generate a bug analysis report after releasing a new version of software.
- Create manual gui test plans using Excel spread sheet.
- Mentoring junior QA engineers.
- Work with development team to produce tools and scripts to aid in test automation.
- Develop and maintain various regression control scripts in Shell and Makefile.
- Developed Q&A Based Manual Gui Testing Software in Qt and C++.
- in-house tools) Work closely with developers to maintain a clear understanding of technical application content, changes, and feature timelines.
- MultiLingual QA, - Software Localization and Localization QA Performed software/document/website localization (English into Korean) Performed manual testing in linguistic, cosmetic and functional issues on commercial website and software Performed manual localization

testing (English into Korean) Performed commercial website localization testing (English into Korean) Focused on verifying localization in documentation, online help, website contents and functionality (hotel, airline, rental car reservation and e-commerce) Projects worked on: Chartwell - Online Casino <http://tst1gm.chartwelltechnology.com/casino/lobby/index.jsp?lang=ko>) Performed all types of verification on the localized website Verified visual, functional and linguistic requirements.

- Verified balance transaction, game rules, error handling and all other scenarios N-Trig (<https://www.n-trig.com>) Performed software localization from English into Korean using SDL Passolo Performed User's Manual localization from English into Korean Performed all types of verification on the localized software and documentation Touricoholidays (<https://www.touricoholidays.com>) Performed website localization from English into Korean Performed localization QA Filed bug reports with advanced comments Verified bug fixes Provided overall review comments and test reports Reviewed technical documentation Wrote initial test specs and updated later <http://www.sma.de>) Verified localized built-in firmware (Korean) that is used in the Solar Technology Machine Performed QA in localization in documentation Alpha-bio Inc (<http://www.alpha-bio.net>) Translated User's Manual from English into Korean.

09/2000 to 11/2008

Senior Member of Technical Staff Cadence Design Systems Inc i¼ City , STATE

- Tested VHDL, Verilog, SystemC, C++/cc/gcc/g++ compilers Tested EDA software (Cadence Functional Verification Software - Incisive) Tested various types of API for VHDL, Verilog, SystemC and C++ Managed multiple project schedules to assure product test in complete in time Project lead: Managed test project teams in US and India Solid understanding of software quality assurance methodologies and software development life cycle Tested C++ class library based NC-SystemC for 6 years including NC-Vhdl, NCVlog, NCSim, SimVision, IFV/IFH, VPI, VHPI, DPI, PSL Solid understanding of RTL design process using EDA tools Reviewed functional specs, test plans and provided technical feedback Created test plans for validating product functional, performance and system requirements Performed GUI/Batch manual test - Created test instruction sets for the manual tests Performed test automation using manual test cases Developed, updated and maintained automated/manual test program in C/C++, SystemC, VHDL, Verilog, Perl, Tcl, Shell Performed black box testing - unit level feature, cross functional, license and regression testing Filed product change request (PCR) against software defects using a bug tracking system Performed root cause analysis (RCA) for the customer failures to determine root cause of failures Verified code changes and hotfixes Monitored regression results and generated failure analysis report on a daily basis Developed GUI test automation tool (record and replay gui commands) and various types of in-house test tools using Perl, Tcl/TK and Shell Scripts Managed R&D test branches (test branch merging).

Education and Training

2000

MS : Computer Science Central Michigan University i¼ City , State Computer Science Completed all required course work except thesis)

1997

BS : Computer Engineering Soongsil University i¼ City South Korea Computer Engineering

1993

BS : Physics Dankook University i¼ City South Korea Physics

Skills

.net, AIX, alpha, API, apple, Audio, Automation, balance, C, C++, Cadence, Clearcase, com, Hardware configuration, concept, Configuration Management, content, controller, Database, debugging, Dec, documentation, Doors, e-commerce, Eclipse, Embedded System, Engineer, English, failure analysis, filing, Functional, GUI, HP-UX, http, HVAC, IDE, instruction, intel, Java, jsp, Json, Korean, Lighting, Linux, logging, MA, meetings, Mentoring, Excel, Sharepoint, Windows 7, Windows, Windows XP, Modeling, MySQL, online help, Operating Systems, OS, Operating System, PCR, Perl, Physics 3, design process, Programming, Project Lead, Protocols, Python, quality assurance, QA, Red Hat, Shell, scripts, Script, Shell Scripts, shell script, Simulation, Software development, software testing, Testing Software, Solaris, spread sheet, system configuration, Tcl, Tcl/TK, TCP/IP, technical documentation, TV, test tools, USB, Verilog, Vhdl, Video, Vista, website