

R&D ENGINEER

Summary

To obtain a senior software QA engineer position to apply my over 10 years of software QA experience in a challenging environment to contribute in a successful software testing team

Highlights

- Unix, Perl, C, C++, HTML5, Javascript, HTML5
- Operating Systems: RedHat Linux, Android, Windows
- Test Automation Tools: Jenkins CI
- Source Management: GIT, Clearcase
- Network Protocols: TCP/IP, HTTP, HTTPS, VPN, FTP, HLS
- Industrial Knowledge: Video and Audio Codecs, Media Containers, Video transcode, Video Display Formats
- Streams Analysis Tools: TS reader, Media Info
- Bug Tracking System: Jira

Experience

R&D Engineer

December 2015 to Current Servicenow i¼ Jersey City , NJ

Senior Staff Software Test Engineer

March 2008 to December 2015 Ssi Schaefer Systems International North America i¼ Williamston , SC

- Test Android versions port on SOC of STB, CTS for Android TV/Lollipop and APKs Verify video decode and transcode in single and multi-process environment Perform reference system level testing on decoding variety of video codecs and container --HEVC, AVC, MPEG2, WMV, MVC, DivX, VC1, VP6/8/9, AVS Perform bitstream certification tests--Allegro HEVC and AVC stress and syntax streams in NTSC and PAL, Sarnoff AVC syntax , formats and supplement streams Perform system level testing on video display output formats -4Kx2K@24/30/60hz, 1080i@30/50/60hz, 1080p@24/25/30/60hz, 720p@50/60hz, 480p@60hz and 480i@30/60hz Perform unit tests on video transcoding from one codec type(e.g
- HEVC) to different codec (e.g.
- AVC) or different video container using file, HDMI or QAM tuner inputs Perform unit and stress tests on video transcoding from one video format type to different frame rates and bit rates Write Shell and Perl Scripts to automatically transcode and compare transcoded file with the golden file.

Staff Software QA Engineer

March 2003 to June 2008 Ssi Schaefer Systems International North America i¼ Anderson , SC

- Write Set Top box reference software test plan, test strategies and design test cases according to engineering design specification and updated them upon changes made to the functionality Performed channel changes testing among MPEG2, MPEG4 and DSS streams in different source input formats and aspect ratio Performed video and audio decode testing by using playback, transport input and QAM input Performed Allegro and Sarnoff MPEG2 and MPEG4 certification bit streams suite testing through each release cycle Worked with developers to get reference STB(BCM97405) with Microsoft MWV codec certified Automated stream muxing tools to mux hundreds of Allegro ES to TS and generated respective YUV files Write C playback program to call Nexus (Settop APIs) APIs to have automation testing on batch decoding of Allegro and DivX streams Performed functional, regression, performance and system testing on video decode and display on new software builds Set up automation testing environment for smoke and stress tests Filed detailed bug reports and verified fixes.
- Collaborated with developers in the review of release note, installation and user guides.
- Wrote shell scripts, perl scripts to automate repetitive test supporting tasks Wrote batch playback video testing application using C.

Software QA Engineer

April 2001 to March 2003 Ssi Schaefer Systems International North America i¼ Columbus , OH

- Wrote Motorola STB software test plan and designed test cases according to Motorola STB marketing guide.
- Performed system level testing on Motorola STB.
- Automated EchoStar STB nightly build to help make sure any checked in code changes error free.
- Designed external customer release form to facilitate on time and correct software release to external customers.

Software QA Engineer

November 1999 to April 2001 Liberate Technologies i¼ City , STATE

- Documented bugs in BUGGO bug-tracking system and verify bug fixes.
- Tested TV Chat client for functionality, error, unit, integration, stress and build acceptance testing.
- Tested Installer and Uninstaller of the TV Chat (both client and server), and performed load test on the TV Chat server on both NT and Solaris platforms.
- Tested the TV Navigator system, which consists of TV mail, TV info, TV phone, TV/WEB, ATVEF, MPEG-2 and Real audio, from alpha to FC.
- Performed performance, security, functionality, units of the application and regression testing.
- Tested the TV Navigator for navigation, usability, frames, images, GUI consistency, links, and content.
- Setup different testing environments and test cases for localization testing.

- Found an Open-Source loop-testing scripts to test the TV Navigator longevity.
- Wrote HTML4 and JavaScript to perform compatibility test.

Software QA Engineer

March 1995 to November 1999 ONE24 E-Commerce, LLC i¼ City , STATE

- Performed software QA on various types of programs, like Perl scripts, Java data screaming application, HTML coding for intermediate processing between Web browser, Web server, SQL database and financial accounting system.
- Designed test plans, constructed test cases and generated bug report.

Education

MBA : Accountancy Computer Information System , 8/94 California State University i¼ City , State Accountancy Computer Information System

BS : Business Administration , 6/89 Jinan University i¼ City , China Business Administration

Skills

alpha, Audio, automate, automation, Automation Tools, C, C++, Clearcase, client and server, content, client, database, engineering design, financial accounting, frame, FTP, functional, GUI, HTML4, HTML5, HTTP, HTML coding, Java, JavaScript, marketing, mail, Windows, 2K, NT, Motorola, MVC, Navigator, navigation, Network, Operating Systems, PAL, Perl, Protocols, QA, Real audio, RedHat Linux, Set Top box, STB, Shell, Scripts, shell scripts, Solaris, specification, SQL, TCP/IP, phone, TV, type, Unix, Video, VPN, Web server