Jeffrey Wilson
Software QA Automation Engineer - […]

Morrisville, PA - Email me on Indeed:

Willing to relocate: Anywhere

WORK EXPERIENCE

Software QA Engineer
SENSUS   -   Morrisville, NC - January 2014 to Present

SENSUS provides hardware and software solutions for electric, gas, and water utilities. Hardware includes electric, water, and gas meters. Software solutions allow the utilities to receive meter reads and perform demand resets and other actions remotely.

● Developed test support of all software functionality for water and gas meters. Inherited a test base of over 400 tests for the legacy UI and automated over 300 of them in 4 months.

● Developed test support for customer billing using CMEP reports (California Metering Exchange Protocol). Automated over 200 test cases in 2 months.

● Setup a "mini-lab" consisting of 25 water meters and 25 gas meters producing actual reads to allow for a realistic environment for test verification and control.

● Organized and lead the automation effort to translate over 1,000 Selenium IDE automated tests of the Device Manager UI into the Selenium WebDriver framework, so these could be run on Jenkins servers.

● Automated over the air (OTA) testing for new products (ally, ESAAP meters, and temperature/pressure sensors) using Device Manager. This included selecting test meters on the fly using DB queries, manipulating the UI with Selenium commands to search for and call various actions using drop down menus. Finally, command parameters were verified in outgoing message files and results verified through DB queries and UI history.

● Provided training for colleagues in water and gas meter radio communication techniques using proprietary tools and software.

● Lead the multi-year QA effort for the new water meter (ally) which involved hardware, firmware, and software testing. Frequently demonstrated the complete solution to both internal and external customer.

● Implemented automation of previously verified defects to eliminate manual re-testing.

● Automated over 250 alarm tests cases, which replay captured alarm messages then verify the data in the DB, UI, and CMEP alarm report.

● Automated direct to meter testing for ESAAP meters which writes .json files using input parameters, subsequently calls a .jar to process those files, and finally interprets the results which are written back to .json files.

● Automated comprehensive UI sanity testing involving more than 750 tests which are used to quickly validate new builds.

● Development team award winner for Technical Skill and Initiative for the months of April, 2014, April, 2015, and November 2015.

● Technologies/Methodologies used include: Java, SQLServer and Oracle Databases, XML, Agile (SCRUM), SVN, Eclipse, Putty, WinSCP, Jenkins, TestTrack Pro, Selenium WebDriver, Salesforce

Consultant

SENSUS - Uberaba, MG - August 2011 to December 2013

Supported the "Device Manager" project. This project re-wrote/re-designed the legacy SENSUS web application.

● Implemented over the air (OTA) commands, which are sent to the meters via an RF network. These commands include demand reset, demand response, sending text messages, and managing alarms. The workings for each command previously existed within the SENSUS radio network interface (RNI), and Device Manager called methods on that API using JAXB and listened for asynchronous responses on JMS queues.

● Frequently tested all OTA commands since this was the main functionality of the application. This entailed debugging through each command being sent and verifying that correct parameters were sent to the RNI. Verified receipt of synchronous/asynchronous responses to ensure that Device Manager correctly processed, stored and displayed the returned information.

● Within an Agile framework and 3 week sprint cycle, did general coding, diagnosing problems and bug fixing. Handled building ISOs using Jenkins and deploying on development machines.

● Participated in daily stand-ups with SCRUM teams including members from 5 locations in North and South America.

● Consulted with product owners and marketing in sprint planning sessions and sprint reviews.

● Communicated design decisions to the development team through prototyping and interactive question and answer Google docs with subject matter experts.

● Worked on-site at customer locations in North America as part of installation/deployment of production systems.

● Technologies/Methodologies used include: Java 7, SQL, XML, UML, Agile (SCRUM), Version One, JUnit, SVN, JMS, Spring, iBatis, Eclipse, Ant, Maven, Tomcat, Putty, WinSCP, Jenkins, TestTrack Pro

Software AG Backend Java Developer

Berlin - 2003 to 2011

July 1999 - July 2003
Berlin, Germany

AIDOS developed a knowledge management software targeted at large multi-national corporations. This software would receive millions of documents as input and then connect the contained information. Effective searching was facilitated through an intuitive GUI based representation of that knowledge.

● Supported the "KAI| Box" project. This project was the proprietary knowledge management software.

● As part of a development team, implemented the search functionality using Apache Lucene.

● Worked in teams to write specifications for modules, then coded and tested those modules.

● Diagnosed problems and fixed bugs.

● Provided on-site installation and customer support for the application in production.

● Technologies/Methodologies used include: Java, EJB, XML, HTML, UML, SQL, CVS, JUnit, Apache Lucene

EDUCATION

American Sentinel University - Aurora, CO
1999 to 2001

Humanities/Business
Milligan College - Johnson City, TN
1990 to 1993