

Test Automation and Software Development

Python, Perl, Java, C#, ASP.NET, C, Awk, Tcl
Docker, Vagrant, Ansible, Git, Perforce, Pytest, Unittest
Requests, Selenium, BeautifulSoup, Django, TDD, RabbitMQ, Kombu
SQL, MySQL, PostgreSQL, SQLite, JDBC, Perl DBI
Object-Oriented Design, Solaris Kernel and Device Driver

Stem 2016 (July – Nov) Test Automation

Created library support to access database via PyMySQL, remote access into docker
containers via docker-py, publish and subscribe to messages to RabbitMQ via Kombu
Implemented tests to validate telemetry data sent from battery to RabbitMQ to MySQL
Implemented tests to validate the health of docker container managing RabbitMQ by
querying and validating list queues, bindings, messaging procs, site name and site summary
Implemented tests for dcmihhibit feature to validate no battery is discharged during
dcmihhibit event by querying MySQL database
Implemented tests for the Django web application to retrieve energy trend report and data
rollup via Requests library

Panzura 2015 (January – November) Test Automation

Implemented an automate test result upload tool in Python to TestLink via TestLink-API-Python-client
Implemented test suites in Python for upgrade, test escapes and data locality testing
Implemented a serial console logging utility in Python via vSPC.py for VMWare virtual machines
Provided library support in Python for multi-threading, clear content, creating licenses and logging

Nutanix 2014 (Contract) QA

Manage nightly sanity test run, triage issues and report test results
Back-port a HA test suite in Python due to product regression
Implemented a tool in Python to clean up and reboot test clients and builders virtual machines

Nimbus Data 2012-2013 Test Automation

Implemented test automation in Python for testing Nimbus CLI and REST API and functional test.

Test execution is based on Pytest. Created a library of CLI supported features.

Test execution is data driven based on configuration file.

Created tools in Python for upgrade, load testing and log analysis

EMC Greenplum 2010-2012 Test Automation

Automated testing in Python for GPDB command utilities and

Client/Loaders/Connectivity testing in unittest

Managed execution of Performance Data-Warehouse (PDW) Testing and

instrumented a tool in Python to run tests based on new builds

Implemented a tool in Python to provide weekly report based on performance baselines that shows performance delta greater than a configured percentage

Instrumented a tool in Python to perform software installation, data loading, fault injection and error recovery

Nvidia 2008-2010 Test Automation

Developed an ASP.NET Web application to automate testing when new device driver builds are available. This tool includes a Perl component that interacts with 3rd party test case management system.

Responsible for test automation for Windows (C#) and Linux (Perl)

Instrumented a tool in Perl that switches booting systems between Windows and Linux

Sun Microsystems 2002-2008 Test Automation

Implemented a tool in Perl to perform Fault Management Architecture (FMA) error injection, error report and fault validation testing. Use Expect to telnet into domain and system controller during testing. Process the differences to extract new error reports and faults and created a lookup table that maps error injection to error reports and faults.

Implemented a tool in Perl to automate system controller fail-over testing. Telnet into server and access system controller to perform fail-over testing.

Automated installation of TPCH and TPCC-based benchmarks in TCL/Expect to install Oracle and benchmarks.

Resonate 1998-2001 Test Automation

Remote installation tool in TCL/Expect that automated loading of applications

Distributed load generator in C and pthreads with HTTP, SSL, FTP and Telnet workload. Utilized the remote installation tool for loading multiple clients.

Data collections tool based on Sun's Explorer used by customer support to gather system information

SNMP agent using SNMP Research toolkit for Resonate's Global Dispatch

JBAS Consulting 1996-1998 Escalation Engineer (Contract)

Technical support for Solaris kernel and I/O sub-system

Implemented a layered device driver that interposed arbitrary character driver in the driver switch table. This tool was used to log kernel buffer address and

timing information to help debug memory leaks with I/O sub-system. Presented this tool at Sun's Customer Support Conference in SF.

Worked as escalation manager in Japan for 4 months to triage escalations from Asia

Sun Microsystems 1989-1996

Network Computing Group 1995-1996 Engineering

Implemented a STREAMS multiplexing driver that routes messages to HW with UPS, LCD and modem. Also implemented a loop-back STREAMS driver to support testing.

Implemented a daemon process to monitor disk defect list and notify system administrator of potential disk failure.

Enhanced the format utility to set error recovery mode page for quicker notification. This tool was used in Video-On-Demand project in collaboration with SunLab and SunSoft

Sun Sparc Technology Business 1994-1995 Engineering

Help ported NextStep to Sparc

Sun Federal 1992-1994 Engineering

Auditing of access control list, Online Disk-Suite and kernel/user level bug fixes

Sun Service 1989-1992 Technical Support Engineer

Provided technical support in system administration, system internals, device driver and kernel core dump analysis

Education: BS Electrical Engineering and Computer Science, University of California Berkeley