YU, LIANG

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Published iOS App "TinBoston" in App Store   Boston 617.901.0618

Full Stack Skills

Project:	Agile, Scrum board, Kanban, Confluence, Jira, Slack
System:	macOS, Redhat, CentOS, Ubuntu, Unix
Coding:	Java, C/C++, Python, Lisp, LaTeX
Scripting:	Shell, Tcl, sed, awk
Testing:	GDB, LLDB, Postman, Jmeter, Testlink, Wireshark, Zabbix, SIPp, EXFO
Mobile:	iOS, Swfit, SwiftUI, Objective-C, Android
Web :	Javascript, HTML, JSP, OpenSSL, OpenSSH
Networking:	REST, SOAP, VoIP, SIP, IPSec, NAT
Backend:	Nginx, Tomcat, Redis, MySQL
Cloud:	AWS, Azure, OCI, OpenStack, VMware
DevOps:	GIT/SVN, Docker, Kubernetes, CI/CD
Tools:	Xcode, Eclipse, PyCharm, IntelliJ IDEA, VIM, Homebrew

Experience

Oracle
Senior(since 2019) Software Engineer in Test

Bedford/Burlington, MA
6yr and 9mo. 2014.2 - 2020.11

✓ *SBC Tunnel Session Management(TSM)*

- Served as the solo test personal in this project, the "go-to" person on TSM urgent issues, documented 200+ defects, including critical performance and capacity issues.

- Improved coverage by 5 times more for TSM SDK by crafting 1000+ test cases and new automation scripts on iOS, Android and Linux platforms, refactored the Tcl scripts into shared library for better reusability.

- Built on-premise testbed with Android phones, iPhones, multiple SBC and 20 Linux VMs across 5 X5-2 Servers, setup Zabbix tool to monitor the network connections and data packets.

- Coordinated resources across QA, Developer teams to ensure urgent defects were fixed and verified on schedule, and provided test guidance on customer-reported issues.

✓ *SBC Security Team*

- Be the first to write the Tcl scripts to automate the TACACS+ test cases and reproduced the urgent customer defect in shell scripts.

- Configured the AAA servers (TACACS+ and Radius) and tested authentication, authorization and accounting features for configuration-abled local users and default factory accounts.

✓ *SBC Virtualization on Private and Public Cloud*

- Deployed virtualized SBC and Linux VMs on the AWS and Azure cloud, led the effort to migrate the Anvil Test framework to the cloud.

- Integrated EXFO APIs into Tcl scripts to automate multiple performance test cases, decreased weeks of manual test effort for different vm core combinations to a couple of days and increased the usage of expensive test equipments in the night time.

- Used SIPp tool to initiate SIP calls between SBC on AWS and Azure clouds, configured openssl certificates in SBC, verified the strong ciphers were used in the VOIP calls.

✓ *SBC REST Interface*

- Collaborated with Dev team in a fast-paced Agile environment, ensured code quality by leveraging TDD method

- Served as the test expert to test the SBC configuration API with automation scripts and Postman tool, opened dozens of defects and provided guidance to sort out the priority

Integrated Computer Solutions
Software Enginner

<div align="right">Bedford, MA
11mo. 2013.4 - 2014.2</div>

✓*Inkarus HTML5/Javascript Game Project*

- Implemented the data sychronization between the Azure Cloud and the application running on the Windows 8 tablet.
- Implemented the advertisement feature on the GameOver page by leveraging the Microsoft Advertising SDK

Acme Packet
Software Enginner Intern

<div align="right">Bedford, MA
8mo. 2012.1 - 2012.9</div>

✓*Applicatioin Session Controller(ASC) Team*

- Developed the Call-Transfer web services application with Java, Dojo and GWT/GXT.
- Helped with ASC automated testing framework by writing test cases in Python.
- Enhanced the quality of an existing iOS mobile application by fixing bugs and improved its UI and workflow by implementing good interface design principles.

Northeastern Univeristy
Student

<div align="right">Boston, MA
2yr. 2010.9 - 2012.12</div>

✓*Analyzing company stock prices via twitter data*

- Processed 1.7 billions twitter messages and 50 millions stock records with Hadoop on a ten-node cluster.
- Used Pig Scripts to sample of the twitter messages and Java to implement the algorithms.

✓*Porting MTCP from Linux to Mac OS X 10.6*

- Analyzed the implementation of MTCP under Linux and listed all the differences in Mac OS X.
- Probed the memory boundaries(stack, heap, data and text sections) of a process under Mac OS X, by using self-defined SIGSEGV handler and setlongjump call() in C.

✓*Probing Operation System*

- Experience in multi-processing programming in C.
- Wrote c codes to mimic the mirroring, string, RAID3 and RAID5 operations.
- Implemented a file system with methods like mkdir, rm, read, write and ls.

✓*Scientific Community Game Project*

- Wrote network-flow avator in Java and wrote unit tests to ensure it can be integrated into the exsited SCG Arena.
- Used Jenkins Continuous Integration System to do the build automation.
- Used EclEmma to measure the test coverage in the SCG project.

Education

Northeastern University - Boston, USA
M.S. in Computer Science

<div align="right">2010.9 - 2012.12</div>

- Computer System ◇ High Performance Computing
- Parallel Computing in MapReduce ◇ Introduce to Database
- Managing Software Development in **Java**
- Program Design Paradigms in Lisp ◇ Advanced Algorithms

Nanchang University - Nanchang, China
B.S. in Computational Mathematics

<div align="right">2005.9 - 2009.6</div>

- Assembly Language(IBM X86) ◇ Foundation of Program Design in **C**
- Numerical Approximation ◇ Data Structure in **C** ◇ Discrete Mathematics