John F. Sullivan, III

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Objective: To work with a talented team in a creative, personal atmosphere in which I can exercise my problem solving skills.

Professional Skills

Programming: Expert knowledge of Go, C/C++, Python, bash. Experience with Perl, Java, sed, awk.

Hardware/Software: Expert knowledge of Red Hat Enterprise Linux (RHEL) and Fedora Linux on x86_64 architecture. Experience with Docker, Ubuntu, Windows 7/10/2008, NetBSD, and MS-DOS.

Storage: Experience with ZFS, BTRFS, LVM, mdraid on RHEL, CentOS, Ubuntu, and Fedora Linux.

Networking: Expert knowledge of configuration and management of Ethernet hardware in previously mentioned environments. Experience with

Other: Expert knowledge of the Git version control systems, experience with software packaging using RPM and Yum, experience with Linux KVM-QEMU virtualization, member of the Association for Computing Machinery (ACM).

Experience

Software Contributions

- Hashicorp Memberlist: https://github.com/hashicorp/memberlist
- Golang Argparse: https://github.com/akamensky/argparse
- GitHub Profile: https://github.com/jsullivan3
- Personal Projects https://worldwidesullivan.com/john/jsullivan.html#section2

IBM, Littleton, MA

Software Storage Developer October 2016 – Present

- Develop, maintain, and debug issues with next-generation storage control plane and data path
- Closely work with operations team to triage and address issues in production environments
- Act as team lead for the storage team for both development and maintenance roles
- Develop next-generation control plane based on Kubernetes

Cimpress, Waltham, MA

Lead Software Engineer August 2015 – October 2016

- Develop, maintain, and debug issues with Consul clusters across the world, including contributing changes to the Consul application
- Develop and maintain tools to automate software engineering tasks for the database team
- Develop access-based API authentication support software and help educate engineers in the process of transitioning from ID-based authentication to access-based authentication

Verizon (Terremark), Lowell, MA

Principal Software Development Engineer; Platform Storage March 2014 – August 2015

- Develop and support platform-level Thrift-based management of cloud storage stack using C++
- Triage and fix storage-related issues in staging and development environments
- Develop Python-based tools to test interfaces and process log files to facilitate debug and triage
- Develop and support storage-related user API into Java-based cloud orchestration layer
- Work with release engineering group to implement a manageable release infrastructure for storage components

Dell, Nashua, NH

Senior Software Development Engineer; I/O Driver Team October 2012 – March 2014

- Develop and support the lower-layer I/O drivers that communicate with SATA and SAS drives
- Add drive failure prediction functionality to the I/O stack in the Dell EqualLogic firmware
- Debug issues with new drives being qualified for use in new and existing Dell EqualLogic arrays
- Provide training on new features of I/O stack to support and sustaining team members
- Provide help for customer support problems and customer-down escalations

Systems Engineer II; Sustaining Engineering March 2011 – October 2012

- Analyze behavior of Dell EqualLogic components in customer environments and work with development teams to provide workarounds and fix problems
- Recreate complex customer environments in which to reproduce issues
- Develop tools to allow engineers to more quickly analyze and identify issues

Emulex, Bolton, MA

Staff Software Engineer September 2007 – March 2011

- Established software build environment and lab infrastructure
- Implemented an iSCSI management solution into the Emulex OneCommand management suite
- As team lead, implemented the Emulex OneCommand management suite for VMware
- Developed cross-platform test suite using Python in Windows, Linux, Solaris, and VMware ESX

Senior Software Engineer May 2000 – September 2007

- Implemented a Microsoft Simple SAN-certified FC SAN installation and configuration suite
- Designed and implemented a simplified installer for the LPFC driver on RHEL and SLES
- Designed and implemented a regression test suite and release agent in Perl
- Developed a Linux driver for iSCSI and FC HBAs
- Maintained the VI/IP firmware MAC driver, DMA engine, and IP stack
- Wrote diagnostic firmware for VI/IP HBA
- Designed the lower layers of the arbitrary topology cLAN Connection Manager
- Maintained the cLAN Connection Manager for WinNT4.0/2000, Linux and Solaris

Engineering Researcher

Worcester Polytechnic Institute (WPI) May 1998 - May 2000

- Designed an Ethernet-based network fault tolerance system (Master's thesis, "Fault Tolerant Ethernet with Sub-Second Recovery")
- Ported a machine vision recognition system from UNIX to Windows NT 4.0, then designed a graphical user interface to improve usability

Education

Master of Science in Electrical Engineering

Worcester Polytechnic Institute (WPI), Worcester, MA May 2000

GPA: 3.4

Bachelor of Science in Electrical Engineering, concentration in Computer Engineering

Worcester Polytechnic Institute (WPI), Worcester, MA May 1998

GPA: 3.4 Graduated with Distinction

Member of Eta Kappa Nu, the Electrical Engineering Honor Society