# Principal Software Engineer

# Steven Douglas

## LinkedIn: https://goo.gl/diAx2e

I'm a quick learning, customer focused engineer with a passion for implementing elegant solutions to complex problems. I can work effectively from hardware to application. I enjoy troubleshooting and understanding systems.

# Summary of Qualifications

## Experience running the following services

- Backups: ZFS send/receive, BareOS/Bacula, countless generic rsync crons.
- Build, CI/CD: GitHub actions, Jenkins, "Coverity Connect", Travis CI.
- Compute: Proxmox, VMWare, KVM, Azure, AWS, GCP, docker.
- Core network services: nginx, haproxy, apache, isc-dhcpd, bind, unbound, dnsmasq, PowerDNS.
- Databases: MySQL, Postgres.
- Memory caches: redis, memcached.
- Message brokers: RabbitMQ.
- Monitoring/logging: Zabbix, ELK, Splunk, syslog-ng/rsyslog.
- Secrets/Authentication: LDAP, Hashicorp Vault (/w consul).
- Source control: Github Enterprise, Gerrit, git-daemon, hgserve.
- Storage: ZFS (incl. Solaris, ZoL and FreeBSD), lvm, Isilon OneFS.
- Task management and documentation: Bugzilla, Jira, Confluence, Wikimedia.

#### Operating Systems

- Linux
- \*BSD
- Assorted unix

#### Programming

- Python
- sh/Bash
- (
- Rust (hobbyist interest so far)
- Perl
- C++ (just in college, limited practical)

## *Appliances*

- pfSense/OPNsense
- Github Enterprise
- Infoblox

#### Automation

- Puppet
- Ansible
- Terraform [incl. Cloud]
- Fabric/Paramiko
- Jenkins
- Github Actions

# Professional Experience

Principal Software Engineer - Skytap, Inc (July 2019 - Present)

Team Lead - Skytap, Inc (October 2018 - July 2019)

Senior Operations Engineer - Skytap, Inc (December 2017 - October 2018)

- Rearchitected spofs as robust, HA services.
- Patched mission critical systems without downtime.
- Grew team and mentored junior engineers.
- Migrated public dns to r53 /w terraform.
- Created software to apply dynamic firewall rules F5, Cisco, and BSD PF
- Created and grew internal pki, including automated signing and renewals.
- Implemented hybrid cloud dns bridged with our internal resolvers.
- Automated on prem and cloud deployments with cloud-init.
- Honed troubleshooting mindset during customer impacting incidents.
- Created "Service tiering" to prioritize the important work.

- During a transitional time between managers, I stepped in to manage some day to day administration for our team. This included roadmap work, prioritization, hiring and more.
- Managed and automated VMWare infrastructure.
- Performed Puppet 3.8 5 migration.
- Upgraded EOL services to supported operating systems and software versions.
- Puppetized unmanaged services.
- Designed and implemented regional clusters of hashicorp vault.
- Designed and implemented CI/CD to automate building and testing of internal tooling.

Senior Software Engineer - EMC Isilon (March 2017 - December 2017) Software Engineer - EMC Isilon (October 2015 - March 2017)

- Designed, implemented and participated in an oncall system.
- Designed Service Level Agreement with our customers.
- Documented and Puppetized derelict business critical services.
- Designed and implemented additional resilient backups and backup replication policies.
- Designed and implemented Release/Patch signing feature to customers.
- Designed and implemented new Build system and build slave implementation, increased stability by 30%, decreased build time by 40%.

Senior Unix Engineer - ATeamSystems (February 2015 - October 2015)

- Automated management and integration with existing tooling.
- Regular direct customer interaction.
- Participated in oncall rotation.
- Created tool for managing bhyve virtual machines.

Cooperative Work Experience (Chemeketa Community College), Salem Oregon (2014)

- Improved and optimized campus building level switching infrastructure.
- Re-cabled shared lab environment.
- Created FreeBSD appliance to boot many computers over iSCSI.
  - Created redundancy and load balancing model leveraging CARP/HAST.
  - Still in use at my community college for 96 PC's (as of 2023).

Douglas Enterprises LLC, Sole Employee (January 2011 - October 2015)

- Built small web hosting business using FreeBSD.
- Provided profitable IT consulting to small and medium businesses.

#### Education

Associates, Chemeketa Community College, OR (January 2011- October 2014)

- Major: Computer Science
- Coursework:
  - CCNA (and CCNA Security)
  - CCNP (Route/Switch, Troubleshooting)
  - o C++
  - o Database design

### Certifications

- Humanizing Work's Agile Certification
- RabbitMQ in Practice by Piotr Zuk
- Manicode Secure Code Training