

JOSHUA C. FOREST

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SUMMARY

Highly motivated professional with a strong background in Devops and Linux administration seeking a full-time position.

COMPUTER SKILLS

Operating Systems: Amazon Linux, Debian, Centos, Ubuntu Server, Redhat Enterprise Linux 5/6/7, VMware ESXi, FreeBSD, OpenBSD, Solaris 8/9/10

Languages: Python, Ruby, PHP, Perl, shell scripting, Java, C++

Software: Terraform, Ansible, Docker, Saltstack, Chef, Puppet, MySQL, PostgreSQL, Apache, Nginx, Tomcat, Varnish, Postfix, Mailman, Corosync, Pacemaker, Samba

SPECIAL SKILLS

Italian: PLIDA A2 Certified

PROFESSIONAL EXPERIENCE

Vets First Choice, Portland Maine

Jan 2018-Sep 2018

Senior Cloud Systems Engineer

A member of a small team focused on architecture, infrastructure, and systems automation.

- Updated and standardized our ECS deployments to be an actual blue-green deployment, resulting in increased uptime and reliability for our applications on ECS.
- Instituted a pull request based system to allow multiple engineers to work coherently on the same repositories. This applied across our Cloudformation, Salt, and Bootstrap buckets.
- Refactored our Cloudformation templates to pull out redundant IAM policies and roll the common pieces all up into one CommonPolicy, which allowed us to only have to change a single piece of the templates to apply across the environments.
- Refactored the salt repository to remove redundant salt states, moving forward further into this currently, to ensure we use pillars for environment based variables, and don't duplicate code at all.

All Around the World SASU, France

Oct 2016-Jan 2018

Devops engineer

Sole engineer focused on architecture, infrastructure, and systems automation.

- Created a full suite of configuration management roles and playbooks to automate system configuration across all our environments.
- Built a set of environments using Terraform and Ansible, to allow us to rapidly scale up our alpha infrastructure as needed. Each customer facing environment is highly available, meaning redundant servers and front ends load balanced.
- Responsible for security auditing and patching to ensure our systems are as up to date as possible.
- Built out ansible based application deployment, and database migration, which allowed any developer or devops engineer to be able to deploy simply and consistently.
- Built a monitoring and alerting system based on Prometheus and Grafana which allowed us to react quickly to any events.

Cashstar Inc, Portland, ME

Jan 2014-Oct 2016

Lead System Administrator

Lead of small operations team focused on operations automation.

- Implemented many scripts to automate toil out of our teams day to day work. These ranged from providing a simple to use web page for non-technical company members to use to verify whitelists, to automation to email users when passwords are nearing expiration on our FreeIPA infrastructure, to giving our developers a simple tool to use to manage switching functionality between datacenters, to a tool for our own internal use to track reserved instances and savings generated by using them.
- Designed, coded, and pushed to production a new deployment methodology based on AWS CodeDeploy allowing faster, easier, and more repeatable deployments, while also allowing us to begin using autoscaling groups to ensure we always have the optimal set of instances running.
- Wrote a set of python scripts to simplify deployment of our software, while ensuring proper protections are in place. Allowing developers to focus on the software, not the process. These scripts offer easier access to information as well, status of hosts in ELBs, currently installed versions, if there are any upgrades available, and control of instances in ELBs.
- Migrated off of rackspace to AWS for all environments in our highly available, multi-region architecture. Saving the company 50% on monthly hosting charges, and gaining immensely in our ability to execute quickly.
- Built out a new jenkins infrastructure to use for all builds within the company. Increasing our speed and ability to test quickly.
- Used Docker within our jenkins infrastructure to continually test out all of our salt states across three different operating system versions to ensure they work properly.

HERE, a Nokia business, Burlington, MA
Senior Systems Engineer

May 2012-Dec 2013

Member of a small and dynamic DevOps team within Nokia delivering high quality operations automation, configuration, and troubleshooting.

- Developed a ruby based API to create cloudformation templates with little or no fuss for use in spinning up infrastructures on AWS, named SIF.
- Designed an automated workflow to use chef-solo to build and deploy products on AWS that were spun up using SIF.
- Quickly ramped up to speed on the home grown local cloud offering within Nokia, and took ownership of all aspects of two production web application environments. Including 24/7 support.
- Lead the way within the team on our migration to using AWS for future web application environments.
- Designed and coded a set of custom AWS tools that tied into our Chef instances for use within our group to deploy environments on AWS quickly, uniformly, and with minimal effort.

Harvard Medical School, Boston, MA
Senior Unix/Linux Systems Administrator

June 2007-April 2012

Integral member of a small team dedicated to the support of the research labs based in the west quad of the Harvard Medical School campus in the Longwood Medical Area.

- ***Devised and implemented a configuration management system using puppet to build out all our linux servers and workstations which resulted in a far cleaner infrastructure allowing system administrators to spend more time on new projects, not fixing poorly configured servers.***
- ***Architected and implemented a postfix based mail and spam/virus filtering system***
- *Drove migration of web infrastructure from standalone servers to a virtualized infrastructure based on KVM*
- *Migrated multiple standalone wiki servers to one centralized wiki server based on confluence*
- *Wrote perl based scripts to automate creation of mailing lists on mailman from LDAP groups, creation of accounts on fileservers, creation of mailboxes on IMAP servers, nagios scripts, munin scripts, and more on an as needed basis.*
- *Implemented Apple OpenDirectory LDAP servers for authentication on our domain*
- *Built out multiple new Samba fileservers that utilize the opendirectory servers for authentication; managed and completed the migration from old standalone servers*
- *Responsible for building, installing, and updating 30+ Linux servers*

- Deployed a VMware ESXi 4.0 server to virtualize the small set of Windows based servers on site
- Assisted in the deployment of an 800TB disk based backup system running OpenSolaris, ZFS, and rsnapshot

Endeca Technologies, Cambridge, MA
Unix Systems Engineer

September 2006-June 2007

Part of a two man team responsible for the 24/7/365 support of a large infrastructure ranging from customer facing demo environments, corporate web sites, and a server farm dedicated to building and testing Endeca's flagship product.

- **Managed 300+ Redhat Linux and Solaris servers**
- Architected and implemented a kickstart/jumpstart environment for Redhat Enterprise Linux 3/4/5 and Solaris 9/10 (sparc and x86)
- Created a new core demo environment to resolve a stability issue with the existing environment
- Assisted in the development and implementation of a migration plan from Resin to Tomcat for our application servers (in progress still when I left)

Corporate Technologies, Burlington, MA
Systems Engineer

December 2004-August 2006

Member of a small team of systems engineers dedicated to solving enterprise problems and supporting their customers.

- **Solaris 10 Certified Systems Administrator**
- **Sun Certified Network Administrator**
- Network Appliance Certified Storage Professional
- Performed many complex Network Appliance installations and data migrations, including 802.11Q VLAN networks, trunked networks, and migrations from Data ONTAP 6.x to 7.x.
- Installed and configured many Sun Solaris 8 and 9 Servers for multiple clients.
- Primary field engineer for Corporate Technologies' Network Appliance related calls.
- Implemented Microsoft Exchange on iSCSI utilizing Network Appliance as back end storage as well as integrating the exchange server into an AD environment.

Fairchild Semiconductor, Portland, ME
UNIX Web Systems Administrator (Co-op)

March 2004-December 2004

- Created a plan to secure all authentications to the fairchildsemi.com website and implemented a perl script to modify URL's on over 10,000 web pages to support eSales initiative.
- Primary maintainer of a cohesive environment for development, testing and production servers that encompass sixteen UNIX servers that included SunONE Java Webservers, BEA Weblogic application servers, and search engine servers (iPhrase).
- As technical lead, successfully organized and executed testing of eSales initiative.
- Designed multiple perl/CGI scripts to assist in the day-to-day activities of the content authors.
- Created and configured SSL encrypted instance of SunONE Java Webserver for a new domain.

Independent Consultant, Portland, ME

August 2003-March 2004

- First line of support for all computer related issues for multiple small businesses in Portland Maine

Intel Corporation, Hudson, MA
Process Engineer

June 2001-October 2002

- Facilitated troubleshooting on a production machine increasing the uptime from 58% to 90% as a member of a high profile cross-site, cross-company team.
- Originated and lead a team that successfully troubleshot and found the root cause of a downward thickness trend in one of the production machines, saving a \$20,000 heaterblock.

Internships, Portland, ME

Summer, 1999 and 2000

Equipment Engineering, and Process Engineering Co-ops

EDUCATION

Bachelor of Science, Electrical Engineering, Rensselaer Polytechnic Institute, Troy, NY
 2000 Dean's List