

# #! Shane R. Sofos

## Systems Engineer

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**Objective** To effectively and continually learn the ever evolving nature of computer information systems while practicing my personal work philosophy of **FOSPAAR**: *Focus, Organization, Sincerity, Patience, Adaptiveness, Awareness and Respect*.

I am always ready for change, adapt to new situations and strive for decisiveness in day to day tasks and key projects. When working on teams I welcome dynamic environments and look forward to growing with every opportunity.

Staying sincere to my skill sets and passions is something I practice on a daily basis. As I believe doing this will allow me to build and grow strong relationships with peers as we work side by side to ship awesome and new changes in progressive environments.

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**Skill Set**

- ◆ 4+ years of experience and expertise in Chef configuration management
- ◆ 4+ years of experience with the Ruby Programming Language
- ◆ 4+ years in high demand fast development/operations environments
- ◆ 4+ years of experience in building, developing and operating large scale global multi-regional infrastructure
- ◆ 4+ years of experience and intimate familiarity in code review processes and workflows
- ◆ 7+ years of BASH scripting in production environments
- ◆ 8+ years of GNU/Linux Systems Administration
- ◆ 10+ years GNU/Linux OS Usage
- ◆ 10+ years Computer Systems Administration
- ◆ Expert knowledge with creating, testing and implementing Infrastructure as Code.
- ◆ Expertise in designing, testing, implementing and operating systems Chef automation for global multi-thousand node environments
- ◆ Expertise in physical and virtual systems provisioning from bare metal to userspace applications
- ◆ Knowledgeable and comfortable working consistently with Object Oriented programming languages such as Ruby
- ◆ Deep understand and expertise in systems package management
- ◆ Excellent understanding of GNU/Linux Operation System fundamentals
- ◆ Great understanding of core systems and cross functional networking principals
- ◆ Acute analytical approach to technical problems
- ◆ Data driven philosophy when problem solving complex systems breakage
- ◆ Strong inter-personal and communication skills
- ◆ Excellent organizational skills
- ◆ Experience in datacenter colocation space management
- ◆ Adept at writing useful systems documentation

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**Experience** **Facebook, Inc.**  
**February 2012 - March 2016 (4 years 2 months)**  
**System Engineer**

- ◆ 2+ years of experience working directly with deploying IPv6 in a large scale Linux environment.
  - ◆ 4+ years of experience as a founding member of the IT Chef team.
    - Built IT Infra's entire multi-regional Chef infrastructure stack multiple times from the ground up and from day one.
    - Lead engineer writing, testing and implementing the majority of the IT Chef code.
    - Cookbook creation ranged anywhere from basic system configurations to complex
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- system automation workflows.
  - Orchestrated 600+ Chef code pushes involving to cookbooks, roles, environments and databags.
  - Authored Chef code to manage Chef itself to include managing its chef-clients on Chef nodes and auto-deploying Chef servers with Chef.
  - Authored an original password randomizer in pure Ruby and integrated it with Chef seamlessly to securely randomize all root user passwords.
  - Authored an effective and creative piece of Chef automation code that dynamically dual-stacked RHEL and Ubuntu nodes with IPv6 network interfaces.
  - Authored all code to convert Chef cookbook based secrets to use encrypted data bags and migrated all Chef Linux nodes to support encrypted data bags.
  - Designed, implemented and tested on the IT Chef stack a previously created Facebook specific Chef integration testing tool called taste-tester.
  - ◆ Learned from scratch the Ruby Programming language not only as a declarative DSL within Chef but as a general OOP higher language.
  - ◆ 4+ years of experience managing thousands of heterogeneous IT Linux systems (CentOS, RHEL, OEL and Ubuntu) with Chef automation.
  - ◆ 4+ years of hardening Chef managed Linux systems with things like LDAP auth, DUO 2-factor auth, OpenSSH Match ACLs and automated sudo policies.
  - ◆ 4+ years of experience building and running the entire multi-regional package management infrastructure for different Linux distributions.
    - Originally designed, built and implemented a multi-regional Linux driven HTTP heterogeneous package management service using Chef.
    - Authored an original package repository synchronization tool in pure Ruby that automatically mirrored defined and desired public repos to keep them up-to-date.
    - Maintained and built all custom IT Infra packages that included RPM and DEB package artifacts.
    - Created a lightweight BASH Jenkins friendly package build script framework to assist in compiling source code based packages from scratch.
    - Mastered the usage of FPM, a ruby meta-packaging tool, that helped build custom FB and non-FB code based packages.
    - Worked closely with Security teams to coordinate, push and mitigate packages affected by major security vulnerabilities.
    - Ensured all and any package spec files or custom build scripts were version controlled within the FB git repositories.
  - ◆ 2+ years of experience building, re-designing, re-building and running the entire multi-regional global Facebook IRC service.
    - Rebuilt and migrated the entire Facebook IRC Infra to the IT Infra stack, including different backend systems, load balancers, and networking.
    - Designed and implemented the re-designed IRC infrastructure entirely in and with Chef so that it was completely re-deployable, codified, immutable infrastructure.
    - Iterated upon the IRC infrastructure by upgrading the whole stack to work with IPv6. It was the first Internet facing IPv6 IT service.
    - The IRC implementation was a multi-faceted Internet facing service that involved touching every layer of the infrastructure stack it was running on top of.
    - Had to coordinate and communicate migrations, outages and upgrades on a large scale as IRC was a company wide service.
    - Managed monitoring IRC service health, users, and traffic by failing regional traffic over during incidents and upgrades.
  - ◆ 4+ years of experience in a fast paced, iterative development and operations environment.
  - ◆ 3+ years of working, helping re-design, managing load balancer infrastructure and traffic for IT Infra services, especially the Chef, Package Management and IRC services.
  - ◆ 4+ years of experience provisioning virtualized Linux machines.
  - ◆ 4+ years of experience with on-call rotations and on-demand repair of large scale service outages when they were in seriously broken states.
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- ◆ 4+ years of experience with site/service event and incident response, incident root cause analysis, incident report creation and incident review post mortem meetings.
  - ◆ 4+ years of experience working side by side with Technical Project Managers to push and deliver awesome new services.
  - ◆ 4+ years of experience working with internal and external auditors to insure compliance of system configurations for financial based infrastructure.
  - ◆ 4+ years of experience rebuilding entire infrastructure stacks to migrate and upgrade them to different datacenters locations.
  - ◆ 2+ years of experience actively participating in Disaster Recovery drills on core infrastructure services to test their resiliency and availability.
  - ◆ Participated in a simulation to recover from a complete infrastructure security breach by engineering full backup and recovery processes for core infrastructure services.

***Google, Inc.***

***September 2010 - January 2012 (1 year 5 months)***

***Unix Systems Administrator***

- ◆ Managed the engineering Ubuntu Linux development systems, which included BASH scripting, code pushes with git, application of security package updates and network monitoring.
- ◆ Converted the entire Slide Design Team to corporate Google hardware and software.
- ◆ Implemented a multiplatform SSHFS software deployment for Slide Teams to securely access remote file systems.
- ◆ Converted all Slide Team members to use SSH key based authentication when accessing a bastion host.
- ◆ Created a standard reproducible scripted account creation automation and management process for newly hired, exited and existing Slide AU employees.
- ◆ Authored procedural documentation on Slide AU user account management, playground creation, SSH usage and ethics guide, New Hires, Exits, and GPG.
- ◆ Improved Slide AU account setup with multiple BASH scripts for LDAP auditing, developmental playground initialization and conversion, file encryption and Slide AU specific OS configurations installations.
- ◆ Assisted the Slide AU Systems Operations team with a major datacenter colocation migration and setup.
- ◆ Supported multiple remote teams in China and Europe.

***Slide, Inc.***

***July 2009 - August 2010 (1 year 2 months)***

***Systems Operations Admin and Facilities Assistant***

- ◆ After returning to Slide, Inc. worked on the Systems Operations team again with a heavy emphasis on Linux systems administration.
- ◆ Maintained, operated and repaired corporate Ubuntu Linux servers and services.
- ◆ Deployed FOSWiki, FreeGhost/FOG PXE imaging system and Apple Netboot System Image Server to improve our desktop and laptop distribution.
- ◆ Administered the Mailman mailing lists, TWiki and Kwok Information internal servers and services.
- ◆ Daily participation in user support of over 100 local employees and multiple overseas offices using mixed operating systems environments.
- ◆ In addition to my role on the Operations Team, worked closely with Slide Facilities to help maintain, organize and improve our three office floors.

***Slide, Inc.***

***July 2007 - September 2007 (3 months)***

***System Operations Intern***

- ◆ After starting my internship with the Systems Operations team, constantly collaborated with Sys Ops team members to support all Slide employee desktop and laptop computers.
  - ◆ Aided in the physical hardware and software configuration maintenance of corporate Linux servers.
  - ◆ Collaborated with network engineering to fix and setup new corporate network
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infrastructure.

- ◆ Completely implemented a new company wiki with TWiki to help improve employee communication, productivity and sharing of project critical information.

***Cal Poly Pomona University Library***

***October 2005 - June 2007 (1 year 9 months)***

***Student Systems Operations Admin***

- ◆ Supported daily all library employees from six different departments.
- ◆ Maintained three computer labs consisting of over 100 computers running both the Windows and Apple operating systems.
- ◆ Completed tasks involving responding to tickets in an efficient manner.
- ◆ Effectively ensured the functional and operational integrity of all computer labs.
- ◆ Solved desktop software and user support problems for library employees everyday.

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Education     ***California State Polytechnic University , Pomona***  
***August 2005 - June 2009***

- ◆ Successfully completed 172.5 quarter units
- ◆ Studied Computer Science, Physical Sciences, and Food Science/Culinology

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Interests     ◆ The Fine Arts - Architecture, Dance, Drawing, Film, Gastronomy, Literature, Music, Philosophy, Video Games.

◆ Free and Open Source Software, GNU/Linux OSes - Specifically Funtoo/Gentoo Linux.

◆ Experiencing the audio fidelity of finely crafted music.

◆ Linguistics, etymology, mythology and the history of humanity.

◆ The history, production, acquisition, tasting of exquisitely crafted world whiskys.

◆ J.R.R. Tolkien Legendarium.

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References Available Upon Request