Work Experience

Summary

Keyboard Cowboys

IT Consultant

Oct 2006 - Present

I operate a local consulting firm for small and medium sized businesses. During peak periods, the firm manages an average of 15 contracted customers each month with a combined average footprint of 32 servers, 180 workstations, and 7 business networks. Services provided cover systems administration, custom application development, break fix, and web development. In most cases, customers were able to reduce their IT budget to \$250 per month by switching to Keyboard Cowboys.

Shoutpoint

Systems Administrator

Sept 2013 - Dec 2015

Designed and maintained critical infrastructure components from the physical networks and servers to application deployment workflow. Developed most of the internal IT tooling in Bash and Node.js to automate a custom Xen virtual machine build system. These internal tools required coordinating resources across 5 geographically diverse data centers and ultimately reduced build time from days to minutes. Developed and implemented tooling that managed and updated internal yum and apt repositories as well as handled the regular deployment of Puppet infrastructure and application code. Introduced the IT and applications departments to version control for infrastructure code. Designed Puppet modules to handle dynamically building internal \mathbf{DNS} and \mathbf{NTP} servers.

GoDaddy.com

Data Center Engineer

Aug 2007 - Aug 2010

I was responsible for the build out and maintenance of enterprise level data centers across a private MAN in the Phoenix metropolitan area. Trained and assessed the skills of junior technicians in proprietary software, hardware proficiency, and company workflow. Headed critical deployments for front of site and infrastructure upgrades for the data center team. Acted as the final tier of customer support for dedicated and virtual machine customers. Compiled and edited all internal documentation created by the datacenter team. Created and maintained the data center team **knowledge base**.

Magenta Computer

Technician

Aug 2001 - Aug 2004

Was responsible for parts inventory, custom desktop and server manufacturing, hardware and software troubleshooting, and data recovery. I cut my teeth here on everything from Intel's 486DX2 to the first Xeons and beyond. At the end of my tenure I had built over 4000 desktop and server computers and repaired about half that many.

Unix administrator with a background in full stack tools development. Direct experience with the design and implementation of build system workflow, re-engineering encumbered systems, and performance analysis. Operating system and build chain agnostic, although I have a soft spot for SmartOS and OS X. My theoretical background in mathematics lends itself handily to general problem solving, rigorous analysis, and implementation nuances. I'm a strong proponent of the idea that systems and systems software can and should be provably correct.

SOFTWARE SKILLS

Excellent	SmartOS, Linux, Unix, Windows,
	Node.js, DNS, Puppet, TFTP, DHCP,
	Nginx, Xen, KVM, Ipfilter, Ansible,
	ZFS, Bash, OS X
Intermediate	Python, FreeBSD, MySQL, dtrace, Re-
	dis, Apache, LATEX, TEX
Basic	Photoshop, SolidWorks
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HARDWARE SKILLS

Excellent	Dell x86 Servers, Serial Connection
	Pinouts, Apple Hardware, Data Cen-
	ter Design, Fiber and Copper cabling,
	Teensy 2.0, Beaglebone Black
TERMEDIATE	CHIP. Teensy 3.2

Public Projects

nullbot-core

github.com/baetheus/nullbot-core

A bot framework for Telegram written in nodejs that implements a connect-like middleware control structure.

shoutapi

github.com/baetheus/shoutapi

December 2015

An api client library and event handler written in nodejs for the Shoutpoint developer api.

documentation

gist.github.com/baetheus

Ongoing

This is a repository of various public documentation that I have created over time. It includes primarily setup processes for open source software on SmartOS zones as well as some small bash scripts for SmartOS management.

EDUCATION

Bachelors of Science in Mathematics

University of California, Irvine

2014 - 2017

I am currently a part time student in my last year of study at UCI. My focus is in pure math with particular attention paid to Abstract Algebra and Galois Theory.