

Preston Maness - January 08 2017

- **Phone:** 512-955-1048 (I'm on [Signal](#))
- **Email/Public-Key:** aspensmonster@riseup.net
 - Fingerprint: 7989 5B2E 0F87 503F 1DDE 80B6 4976 5D7F 0DDD 9BD5
 - Keybase.io: <https://keybase.io/aspensmonster>
- **Code:** <https://github.com/aggroskater/>
- **LinkedIn:** <http://www.linkedin.com/pub/preston-maness/8b/973/202>

The Involvement

- Participation in Open Source and Free Software Community
 - [Staying on top of bugs my code introduces](#) (My idle detection code for the BOINC project had a null pointer dereference bug under certain environment conditions)
 - [Debian GNU/Linux Package Maintenance](#) (Fixed logging problems when moving from sysv init to systemd by tweaking the service file of the BOINC package.)
 - [Regression squash and feature enhancement for BOINC distributed computing project](#) (**C++** ; A pull request that fixed idle detection regression in BOINC client --originally reported in a [Debian GNU/Linux bug](#) I helped to troubleshoot-- and improved its handling of various edge cases. This also introduced me to the autotools build suite/toolchain.)
 - [Initial analysis of FinFisher malware suite](#) (Used prior experience with browser addons/extensions to analyze the FinFisher malware suite's Firefox browser addon/extension attack vector. See [pull request](#))
 - [Bug Squashing with GNU FSF's wget](#) (**C** ; Tracked down a stubborn segfault that was killing long-running web scrapes prematurely in a non-recoverable manner)
- Reasonably Complete School Projects
 - [Hardware Random Number Generator](#) (Senior Design Capstone Project)
 - [Terminal-based Aces Up card game in C++](#)
 - [4-bit ALU with complete functional verification \(VHDL\)](#)
- Languages and Tools
 - **Programming:** Bash, Python, SQL, Javascript-related, C# (older experience: C++, C, Java, VHDL, HCS12 assembly)
 - **Tooling:** git, GCC, eclipse, make, Doxygen, jenkins, valgrind, Visual Studio, numerous javascript-related tools, Excel
 - **Operations:**
 - GNU/Linux: Apache, MySQL, PHP, Perl, Varish HTTP accelerator, Wordpress, MediaWiki, Nagios monitoring, pnp4nagios, Vagrant VM manager, Ansible automation, APT and RPM package management, Debian, CentOS and RHEL distribution experience, basic LDAP authentication and authorization mechanisms.
 - Windows: Minimal exposure to Azure.
 - AWS: Experience with EC2, LCs, ASGs (and lifecycle hooks), ELBs, S3, VPCs, CloudWatch, DynamoDB, Kinesis streams, Elasticsearch Service, EMR, Redshift, IAM; all typically managed with an infrastructure-as-code approach with Ansible. Also utilize the AWS CLIs.
 - Networking: Understanding of: Cisco firewall and CSS configs, F5 load balancer configs, OSI network model, VLANs (I also dabble with Mikrotik network gear).

The Experience, Certs, and Education

- Employment
 - **360Connect** (10 months ; Apr. 2016 - present): Software Support Engineer, involved in managing systems integrations and analytics pipelines (managing middleware and certain infrastructure).
 - Built and maintained [Snowplow Analytics](#) real-time and batch pipeline on AWS, utilizing Ansible to manage the infrastructure as code. This pipeline provides the organization with thorough event-level data on all integrated systems and online properties, enabling the organization to perform more thorough and extensible business analysis at a fraction of the cost of alternatives (Google, Adobe, et.al. offerings).
 - Provided feature enhancements to Coffeescript plugins (tested with Mocha/Chai) for the [LeadConduit](#) platform:
 - [extending XML integration](#)
 - [extending JSON integration](#)
 - [extending response handlers](#)
 - Made tweaks to a legacy C# codebase in order to capture analytics data that was previously not collected.
 - Automated numerous aspects of position by utilizing public APIs and python:

- Wrote python script to [appropriately poll](#) mailgun event API and upload to S3 for further ETL work and alerting.
 - Used python extensively to interact with [LeadConduit Platform API](#) and programmatically manage/update/deploy lead flows. Also backed up daily data to S3.
 - Wrote ETL scripts in python to marshal and munge data from S3 into Redshift, for later joining with other business intelligence.
- **Rackspace Inc.** (11 months ; Oct. 2014 - Sep. 2015): GNU/Linux Systems Administrator I. Everything I did at HostGator and more :) Customer-facing support via calls and tickets. Position requires understanding of Cisco and F5 firewalls, load balancers, and switches, along with a high-level understanding of datacenter network architecture (aggrs, core routers, edge routers, multiple back-end management networks). Work with DAS, NAS, and SAN storage mechanisms. Basic VMware tasks (clone, resize, vMotion, etc). Support and troubleshoot our OpenStack-based cloud products. Developed internal python tool that interacts with several internal REST APIs to automate numerous issues where networking and systems administration teams intersect in an effort to reduce response times to incidents even further.
- **HostGator.com LLC** (13 months ; Jan. 2011 - Feb. 2012): GNU/Linux Web Hosting Systems Administration (Calls, Chats, Email), understanding of Apache, Exim, Dovecot, MySQL, cPanel, WHM, bash/perl scripting, strace debugging, customer site performance evaluation and optimization. Pushed for more thorough, root-cause analysis of customer issues at **first contact** to avoid unnecessarily prolonging service degradation.
- Certifications
 - Red Hat Certified System Administrator, RHEL 7, [150-035-228](#)
- Education
 - Bachelor of Science, Electrical Engineering, Computer Engineering concentration, Texas State University, class of 2014
 - Associate of Science, Applied Mathematics, Texas State University, class of 2014