## **Preston Maness - July 04 2016**

- Phone: 512-955-1048 (Signal calls/texts preferred; let's keep the spooks on their toes, shall we?)
- 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

This is the stuff that I'm passionate about. These are the things I put effort into and learn for no better reason than "because." Because technology is awesome and community is important. There's a mix of software and hardware projects and languages/tools here given my formal EE education.

- 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)
  - <u>Debian GNU/Linux Package Maintenance</u> (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 <u>Debian GNU/Linux bug</u> I helped to troubleshoot-- and improved its handling of various edge cases. This also introduced me to the autotools build suite/toolchain.)
  - <u>Devops/Bug Squashing/Feature building work for Youtube Center</u> (Assisted @YePpHa with automatic plugin updating for the YTC project. See <u>pull request</u>)
  - <u>Initial analysis of FinFisher malware suite</u> (Used prior experience with browser addons/extensions to analyze the FinFisher malware suite's Firefox browser addon/extension attack vector. See <u>pull request</u>)
  - Member of ArchiveTeam ( Python ; Preserving digital heritage before it is rm -rf /'d from existence. Extended existing web-scraping pipeline to perform post-processing of scraped assets contained in ISO 28500-conforming WARC files. Sampling and shrinking of payloads (High-definition VODs) reduced storage requirements by 60 to 80 percent while maintaining minimum viable archive of material.)
  - <u>Bug Squashing with GNU FSF's wget</u> ( **C** ; Tracked down a stubborn segfault that was killing long-running web scrapes prematurely in a non-recoverable manner)
- 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)
  - Class A power amplifier
- Languages and Tools
  - Programming: C++, C, Java, VHDL, HCS12 assembly
  - Scripting: Bash, Perl, Python
  - Development Tools: git, ant, GCC, eclipse, make, Doxygen, jenkins, valgrind, autotools
  - · Software: Xilinx ISE, NI Multisim, LT-SPICE, MATLAB, Microwind, iverilog, gtkwave, ngspice, vim
  - Systems Administration:
    - 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
  - 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

Where I've been.

- Employment
  - 360Connect (4 months; Apr. 2016 present): Software Support Engineer, involved in managing systems integrations and analytics pipelines (managing middleware and some infrastructure).
    - Provided feature enhancements to Coffeescript plugins (tested with Mocha/Chai) for the <u>LeadConduit</u> platform:
    - extending XML integration
    - extending JSON integration

- Automated numerous aspects of position by utilizing public APIs, Selenium, and python. Wrote simple flask app to consume MailGun webhook events and automatically email appropriate person with details. Wrote python script to appropriately poll mailgun event API and upload to S3 for further processing. Used python extensively to interact with <a href="LeadConduit Platform API">LeadConduit Platform API</a> and programmatically manage/update/deploy lead flows.
- 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 degredation.
- Pei Wei Asian Diner (12 months; Jan. 2010 Jan. 2011): Cashier. Performed any and all front-of-house duties as necessary (bussing, closing, etc).
- **Colorado School of Mines** (4 months; Sep. 2009 Dec. 2009): "Digger Dialer" Fundraising, Donation Solicitation, general pestering of alumni within a call-center environment.

### Certifications

Red Hat Certified System Administrator, RHEL 7, <u>150-035-228</u>

#### 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