**Experience** 

# Office of Financial Research, US Treasury <u>Senior Systems Engineer</u>

Senior member of high performance computing/analytics team: Hadoop/HDFS operations, grid computing/SLURM operations, datacenter expansion planning, architecture, troubleshooting, root cause analysis, analytics/pyspark proofs-of-concept. Subject matter expert for Linux troubleshooting, operations, change control. Work daily with Cloudera , Bright, Hue, Hive, Impala, Spark, Splunk, puppet, VMware, Citrix, Netapp, Panasas, Bright, satelllite, postgres.

# Groupon— Member of Technical Staff

Involved in all aspects of the production network; datacenter expansion, circuit provisioning, hardware deployment, network monitoring, architecture, troubleshooting, DDOS mitigation, root cause analysis, and on-call. Configure/debug Juniper routers, switches, firewalls, and A10 and Netscaler loadbalancers. Maintain site-to-site VPN connections for remote offices. Maintain a 10/40/100 Gigabit Ethernet infrastructure for 15,000 production servers in multiple datacenters worldwide while driving significant expansion efforts.

## LivingSocial— Lead Engineer, Enterprise Platforms

Deploy, monitor, and maintain networks and computing clusters distributed worldwide for internal and backoffice system needs. Administer VMware and Citrix Xen virtualization environments, as well as CentOS, RHEL, and Windows servers. Provide application support: MySQL, Apache, DHCP, RADIUS, DNS, SMTP, iptables. Administer monitoring and backup services. Configure and install Cisco routers and switches and monitor all deployed network devices and telecommunications circuits. Administer and maintain RSA SecurID two-factor authentication and access control.

## **CodeRyte** (a subsidiary of 3M) — <u>Systems Engineer</u>

Support and maintain a high-availability Linux environment for CodeRyte's statistical Natural Language Processing SaaS product. Identify and resolve any issues with infrastructure: VMWare cluster, LDAP, Compellant SAN, Cisco VPN. Supervise technical staff on the Help Desk. Provide mentoring to junior staff, manage incoming trouble ticket queue, solve any walk-in issues, monitor services with Zenoss. Manage and support Ubuntu and OS X desktop systems for 140 users. Manage purchasing, inventory, and vendor relations for infrastructure assets.

| University of Maryland   |                 |
|--|-----------------|
| Institute for Advanced Computer Studies — <u>Technical Staff</u> | 2/2007 – 6/2011 |
| — <u>Faculty Research Assistant</u>                              | 8/2010 – 6/2011 |

Contributed to the expansion and maintenance of the UNIX computing infrastructure for the Institute for Advanced Computer Studies. Experienced in cluster maintenance (GPGPU, TORQUE, Hadoop), network-attached storage, mail services, Red Hat server installs, network troubleshooting, and desktop maintenance. Managed production Linux server configurations with Puppet. Supervised undergraduate technical staff on the UMIACS Help Desk. Provided mentoring to student staff, managed incoming ticket queue, solved walk-in issues, monitored services with Nagios.

- Project manager for UMIACS website redesign. Supervised contractors, transitioned and created content, provided input for site architecture, graphic design, and Drupal CMS modules. Maintained and upgraded existing website, including implementing jQuery and web analytics.
- Prepared, published, and evaluated an RFP for web design services. RFP and evaluation criteria subsequently adopted by University procurement for ongoing and future solicitations.

6/2013 – 6/2015

6/2015 – present

6/2012 - 6/2013

8/2011 - 6/2012

As a member of the Operations Security/Systems Security team, was responsible for the daily administration of over 200 servers and their applications, providing the bulk of Authentication, Authorization, and Accounting services for AOL internal assets: Kerberos, RADIUS, TACACS+, anomaly detection, Webtrust Certified PKI, as well as root password management and passwd file management for 18,000+ hosts.

- Successfully researched, architected, and implemented a complete redesign of the authentication system, and worked closely with other departments to facilitate the adoption of Kerberos.
  Deployment leveraged existing Foundry-based load-balancing and anycast infrastructure.
- Contributed extensive documentation of procedures, policies, systems and projects.

#### Metromedia Fiber Network (AboveNet) — Peering Manager

Created and implemented a formal corporate peering policy and published accompanying documentation and procedures. Enforced policy decisions for all existing and new peering sessions, and eliminated all public peering sessions with transit customers. Negotiated interconnection contracts with other companies for the exchange of Internet traffic between MFN and other backbone networks, including renegotiation of existing contracts.

#### Juniper Networks — Consulting and Beta Engineer

Embedded on-site with customer engineering and operations teams: debugging network issues, tracking and working to resolve all software bugs and any hardware problems. Worked with other vendors on interoperability in customer labs and in the network. Led weekly customer meetings and facilitated off-sites, headquarters visits, and executive meetings. Represented customer interests in new product design and planning activities.

- Coordinated and edited responses to RFIs that successfully won contracts in excess of 10 million dollars. As the first Consulting Engineer for Juniper Networks, was responsible for the successful qualification and deployment of the M40 into UUnet, MCI, and Cable and Wireless.
- Won multiple service awards for outstanding performance in regional operations and for highest cumulative net dollar bookings.

## BBN Planet (SURAnet, GTE Internetworking) — <u>Network Engineer</u>

Worked extensively on successfully integrating an established regional network with a large national backbone, including implementing an internal protocol change. (IS-IS to OSPF).

- Authored and implemented corporate policy regarding IP address allocation for both the regional and core networks. Acted as corporate liaison with the address registrar.
- Developed tools for automated system configuration and customer turn-up. Wrote address allocation and registration Perl scripts to ensure proper customer provisioning and route aggregation.

## **Related Experience**

| Systems Administration : Linux (Red Hat, Debian, Ubuntu), BSDI, FreeBSD, Mac OS X, Solaris, Windows 7/XP, |  |
|---|--|
|   | Perl and shell scripting, DNS and BIND, SMTP, LDAP, Kerberos, Postfix, Apache, |
|   | VMWare, Xen, iptables, Nagios, Puppet, CVS, SVN, Hadoop, MYSQL, Splunk         |
| Networking:   | TCP/IP, BGP, ISIS, OSPF, SNMP, TACACS+, STP, IDS, VRRP                         |
| Networking Vendors:   | Juniper ,Cisco, A10, ADVA, Foundry, Proteon, Citrix                            |

### **Education**

University of Maryland, College Park: GPA in Major: 3.875 Bachelor of Science in Geospatial Information Systems Overall GPA: 3.500

2/2001 – 7/2001

2/1998 - 1/2000

12/1994 - 2/1998