Andrew Ragusa

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Objective

To obtain a responsible position with a dynamic company that will utilize my extensive computer skills, and provide an opportunity for personal advancement while making a real contribution to the organization. I like working on problems that are not well defined and I am a self-motivated team player, who is not afraid of hard work. I have experience taking customer requests and requirements; and turning them into complete and successful products. I have also worked on long-running mission-critical applications that ran on a multiple-vendor platform, supported the software in a nationwide deployment (while supporting the OpenSource community using the applications), and developed a test infrastructure to test all aspects of the software and vendor hardware.

Education

Bachelor of Science in Computer Science at Indiana University Bloomington 2006

Technical Expertise

- OpenFlow Development, Testing and production deployment
- Programming using Net-SNMP, SQL, CGI, and RRDtool, Flash/ActionScript, HTML 5
- Web design using Cascading Style Sheets
- Javascript OOE programming in web-service based environments (YUI)
- Database Design (MySQL)
- Templating web Front-ends
- Familiar with several distributions of Linux including: Gentoo, Debian, Redhat, Suse, Mandrake, Ubuntu
- Built and worked in a distributed computing environment (openMosix, MPI, OpenAFS)
- Server setup: HTTP, SMTP, FTP, Samba, DNS, MySQL
- Linux Security
- Wireless Security
- Network Monitoring and Performance Testing
- Service and Host monitoring using Ganglia and NAGIOS
- Programming Languages: Perl, Python, Java, Javascript/HTML, CSS, C, C++, Bash

Work Experience

2005-current System Engineer and Software Engineer:

Global Research Network Operations Center

Indiana University Bloomington Division of UITS

- Developed OESS (Open Exchange Software Suite) an OpenFlow based Wide Area Network Layer2 circuit provisioning service and implemented on Internet2's AL2S network, transiting over 1.5PB of traffic per day.
- Developed FlowSpace Firewall an OpenFlow based switch/network Hypervisor, enabling Internet2's Network Virtualization Service
- Developed SciPass an OpenFlow based ScienceDMZ and IDS load balancer
- Developed GRNOC Ticketing Tools (Notification Tool, Reporting tool, Automated Calendars)
- Developed the GRNOC RealTime Atlas and SNAPP 2.0 and SNAPP 3.0
- Developed Animated Traffic Weathermap
- Worked directly with Software as a Service customers to help GRNOC Tools meet their needs
- Install Servers, Network Devices, Optical and Out of Band infrastructure
- Setup various software programs (Ganglia, perfSONAR, NAGIOS)

1999-current Software Engineer:

Thermal Process Technology Inc. Naperville IL

- Worked converting WinCalc Thermal Processing software to 32-bit Window's Operating systems from 16 bit.
- Integration of calculations in degrees Celsius while fixing several bugs with the original release
- Administering to all servers and customers of Thermal Process Technology, while providing support for WinCalc 2000 software.

2004-2006 System Administrator Distributed Data Everywhere (DDE) Lab, Professor Beth Plale

Indiana University Bloomington

- Maintain Servers and equipment such as Databases, web-servers, grid applications (i.e. Gridport, Globus Toolkit, OGSA-DAI).
- Writing small scripts, client/server applications
- Developed and troubleshot dedicated servers, development of servers, and launching of several small projects.
- Heavily involved in the LEAD (Linked Environments for Atmospheric Discovery) project through IUB. Focus on data streams and end-user applications
- Maintained and wrote the web-site for the DDE Lab

2002-2004 Summer IT/ Networking Assistant.

Indian Prairie School District 204, Naperville - Aurora IL

- Worked with Ric Smith the Network Designer upgrading the networks of all (21) the elementary schools in the district
- Involved Sub-netting, troubleshooting of problems, fixing service requests, deploying new networking equipment, wireless design and security, working on a firewall, router, and switch configurations
- Experience in sub-netting, configuring Cisco routers, switches, wireless access points, and network design

Publications

- Super Computing 2014, SciPass: a 100Gbps capable secure Science DMZ using OpenFlow and Bro, 2014 Indiana University
- On using wide-area inter-domain OpenFlow paths, 2014 Indiana University
- Linux Fest presentation, Distributed computing using openMosix, 2004 and 2005 IUB & IUPUI, 2004-2005 Indiana University
- Indiana University Undergraduate Research Conference, DATA FLOW FOR REAL-TIME INGESTING OF STREAMING DOPPLER RADAR DATA, 2006 Indiana University

Awards

- Member of the National Collegiate Scholars
- 2004 Student Showcase Award for Computers and Computing Thematic Community, Linux Cluster
- Deans list all semesters at Indiana University

References

Ed Balas, Software Engineering Group Manager, IU GRNOC 812-856-9102 Luke Fowler, Systems Engineer Group Manager, IU GRNOC, 812-856-0978 Pete Moyer, Principal Consulting Engineer, Nokia, 510-579-1570 Beth Plale Ph.D., Indiana University, Professor of Computer Science, 812-855-4373