

David Leifker

leifker@wisc.edu

1414 Andaman St.
Sun Prairie, WI 53590

Cell: (312)218-4194

OBJECTIVE

My career objective is to find a job in the Madison area that will provide growth and the opportunity to design elegant solutions to achieve project goals with emphasis on free and open source software.

EXPERIENCE

Senior Systems Engineer, 6/08 - current

Encyclopedia Britannica, Chicago, IL

Design data center architecture

Build, deploy, monitor, maintain production physical & virtual Linux servers

Network engineering: WAN, firewalls, wireless/wired routers, & VPN services

Software development: Java, Python, Perl, Bash Scripting, Web, GWT

Level 2 Systems Engineer & OS Arch Linux Team Lead, 6/05 - 5/08

Lockheed Martin, Gaithersburg, MD

Independent Research & Development

Deployed, integrated, maintained Google Earth Enterprise

Developed Linux images with strict government security requirements

Built hundreds of Sun, Linux, Windows servers and NetApp storage

Wide Area File Systems/Wide Area Data Systems

Hardware Engineer

EDUCATION

Masters Computer Sciences, May 2014

University of Wisconsin-Madison

Overall GPA: 4.00/4.00

Bachelor of Science Electrical Engineering, May 2005

Bradley University, Peoria, IL

Minor in Sociology

Major GPA: 3.40/4.00

AWARDS

Making It Happen Award, 2008

Encyclopedia Britannica, Chicago, IL

Individual Technical Excellence Award, 2007

Lockheed Martin, Gaithersburg, MD

"The unique technical capabilities of David Leifker have resulted in critical contributions to two programs. He used new tools, methods and technologies to improve engineering testing and verification methods, reducing test schedules by 31 days and saving 100 hours of manual effort. David also reduced the time needed to configure 100 network servers by 175 days, saving 550 labor hours. His contributions have resulted in deliveries of key program milestones." - IS&GS Executive Vice President Linda Gooden (April 28, 2007 Celebration of Excellence)

Five Special Recognition Awards, 2005-2007

Lockheed Martin, Gaithersburg, MD

Certificate of Appreciation, 2006

National Geospatial-Intelligence Agency

PROJECTS

Buffer Manager & B+ Tree Index, 2013

DBMS: Design And Implementation (CS564)

Software Defined Networking NAT/Firewall, 2013

Adv. Computer Networks (CS740)

Scheduler Simulator, 2012

Intro. To Operating Systems (CS537)

OSPF UDP Router, 2012

Intro. To Computer Networks (CS640)

Distributed Usage Statistics Collection and Reporting, 2012

Real-time usage statistics collection and analysis from globally distributed data centers.

Britannica Atlas Project, 2010-2011

A combination of Google's Map API integrated with Britannica's world data & article content which also includes 3rd party GeoNames data. The web application front-end is built on Google's Web Toolkit making the application behave like a traditional desktop application. Geospatial features supported in the back-end by Postgresql and PostGIS.

Linux Firewall Router & Network Re-architecture, 2010-2011

Replaced Cisco infrastructure with low-cost Netgear equipment and designed redundant Linux-based firewall/routers running OSPF. The re-architecture was implemented gradually and without interruption to network services to globally distributed data centers and corporate offices.

OpenVPN Infrastructure & Web Interface, 2009-2010

Setup corporate OpenVPN to connect users, global offices, and data centers. Usage statistics for security audits consolidated in a central database and exposed via a GWT based webapp.

WAN Simulator, 2009-2010

Modified Squid server to interact with Linux QoS/netem modules to test varying network conditions per client and origin server. Included GWT front-end for management.

iSCSI SAN, 2008

Designed and built a fast fault-tolerant iSCSI storage system using LACP link aggregation, multipathing, and a number of open-source components including: mdraid, lvm, keepalived, DRBD.

Rapid Multi-OS Server Deployment Platform, 2007

Independently proposed, designed, and implemented an automated multi-OS deployment tool for Google Earth Enterprise (Fusion and Streaming), WebLogic, Oracle, and ArcGIS servers. The prestigious Individual Technical Excellence Award was awarded for this project.

GeoINT Visualization Services (GVS), 2006-2007

Integrated and deployed Google Earth Enterprise and value added services on two classified networks that included over 120 servers & almost 300TB of storage.

128bit AES FPGA/VLSI Implementation, 2005

Bachelor of Science EE w/ Computer Option Capstone

SKILLS

Linux 15 years, 8 professionally

kernels 2.4 - 3.x, mdraid, dmccrypt, lvm, corosync/pacemaker

Languages: Java, C, C++, PHP, Perl, Python, Bash, SQL, VHDL, 80515 Assembly

Networking: WAN simulators, Quagga/zebra/OSPF, OpenWRT, OpenVPN, iptables, high availability redundant routers, ISC DHCP, BIND, PowerDNS, LVS

Network Storage Tech: Fibre Channel, iSCSI, AoE, NBD, DRBD, NFS, AFS, GFS2

Services: Google Earth Enterprise Pro, Apache, Tomcat, Weblogic, Haproxy, Squid, Bacula, postfix, OpenLDAP, mit kerberos, Samba, Zabbix, ejabberd, FTP, IRC servers, Icecast servers

Virtualization: KVM, Xen, VMWare ESX, VirtualBox

Web Development: GWT, Javascript, CSS, XLST, HTML/XML

Development Tools: SVN, GIT, CVS, Eclipse, MAT, gdb, valgrind

Databases: Postgresql (+PostGIS), MySQL, Oracle, sqlite

Hardware: custom built hardware, HP/Dell Blade servers, Sun servers, Network Appliance, various storage arrays, Tape drives, Cisco/Netgear/Linksys switches & routers, High-end workstations