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Objective

To obtain a Unix administration position that allows me to use my system programming and infrastructure design skills in a large-scale production-oriented environment.

Technical Skills

Platforms: AIX, Solaris, Linux, HP-UX, IRIX, X-Windows, VMS, MS Windows, MS-DOS, Novell, MacOS

Languages: C, Perl, sed, awk, Unix shell scripting, HTML, XML, SQL, C++, PHP, Pascal, BASIC

Packages: sendmail, Apache, wu-ftpd, BIND, TCP Wrappers, PAM, PostgreSQL, Perdition, CVS, autoconf, rdist, Oracle, TSM

Protocols: SMTP, POP, IMAP, HTTP, CGI, FastCGI, XML-RPC, FTP, LDAP, PH, DNS, SSH, SSL, TCP/IP, NFS, NIS

Specializations: Configuration Management Infrastructure, Email Routing Architecture, Authentication Integration (e.g., PAM and Apache modules)

Professional Experience

Feb. 2001-present **University of Illinois at Urbana-Champaign (UIUC) Campus Information Technologies & Educational Services (CITES) Technical Lead, Production Systems Group**

Established and led a group of Unix administrators in a production data center environment using Solaris and AIX. Led effort to develop automation tools and configuration standardization to improve economy of scale. Was instrumental in the formation of separate groups to manage systems and services, which resulted in increased economy of scale, lower staff turnover, better system security, and higher quality of service for CITES's customers; presented a paper about this at LISA 2001 (see below). Designed and deployed a redundant storage system for UIUC's Student/Staff E-mail Cluster to improve reliability and reduce downtime. Redesigned and deployed a new architecture for routing inbound email at UIUC to improve scalability, fault tolerance, and efficiency.

- Fall 1997-Feb. 2001 **University of Illinois at Urbana-Champaign (UIUC)**
Campus Information Technologies & Educational Services
Unix System Administrator, Workstation Services Group
Managed all aspects of Unix workstations and servers for campus customers, including hardware and software upgrades, software installation and configuration, and addition and deletion of user accounts. Presented training seminars on sendmail and Apache for campus Unix administrators.
- Fall 1996-Spring 1998 **University of Illinois at Urbana-Champaign (UIUC)**
National Center for Supercomputing Applications (NCSA)
Unix System Administrator
Designed, implemented, and maintained network of HP and SGI workstations. Established backup procedures.
- Summer 1997 **Taos Mountain Consulting, Palo Alto, CA**
Unix System Administrator
Consulted at The Gap, Inc., enhancing network of AIX and Solaris machines. Assisted with mainframe interoperability and database issues.
- Summer 1996 **Argus Systems Group, Urbana, IL**
Unix System Administrator
Maintained Solaris workstations and change control repository for kernel developers. Implemented system call test suite for Argus' security enhancements to the Solaris kernel.
- Fall 1995-Spring 1996 **UIUC Genetic Algorithm Lab**
Unix System Administrator
Installed, configured, and maintained heterogeneous network of AIX and Linux systems.

Noteworthy Projects

psgconf - <http://www-dev.cites.uiuc.edu/psgconf/>

Designed and implemented an open-source modular configuration management system written in perl. Presented a paper about this at LISA 2003 (see below).

Encap Package Management System - <http://www.encap.org/>

Developed an open-source package manager that has become a vital system administration tool at many sites world-wide.

sendmail Development - <http://www-dev.cites.uiuc.edu/sendmail/>

Contributed code to sendmail project. Presented tutorial on sendmail and maintained online documentation.

libtar - <http://www-dev.cites.uiuc.edu/libtar/>

Developed an open-source library for manipulating tar files.

fget - <http://www-dev.cites.uiuc.edu/fget/>

Developed an open-source FTP client library and command line mirroring tool.

Papers

[Defining the Role of Service Manager: Sanity Through Organizational Evolution](#),

USENIX/SAGE, Proceedings of the 15th System Administrators Conference (LISA 2001), San Diego, CA

[Preventing Wheel Reinvention: The psgconf System Configuration Framework](#),

USENIX/SAGE, Proceedings of the 17th System Administrators Conference (LISA 2003), San Diego, CA

Professional Activities

Invited presenter at Sendmail, Inc. annual developers' meetings starting in 2001.

Member of [USENIX](#) and [SAGE](#).

Education

B.S. in Computer Science, University of Illinois at Urbana-Champaign (UIUC)
College of Engineering, August 1998

References

Available upon request.