

OBJECTIVE

To obtain a full-time position within a team allowing me to continue to work with cutting edge technology, expanding and giving my years of professional experience to your organization.

EDUCATION/ACCREDITATION

B.Sc.	Computer Science - University of Victoria Emphasis on Software Engineering, Networking, Languages, Compilers, and Graphics	1992
Training	Solaris System Administration; UNIX Systems Administration; WebSphere Administration; iPlanet Administration; CORBA Development and Administration; Orbix Administration; Oracle Administration; AIX System Administration; Hardware / Software Support; SunNet Manager; UNIX Communication and Networking; Group Leadership; Speech Communications; Teaming for Extraordinary Performance; Sun Java Programming (Basic and Advanced), Object Oriented Application Design with UML, Technical Writing	
cSAGE	Certified Systems Administrator	2002
Other	Several customer recognition awards	

SKILLS

<u>Sys Admin:</u>	SunOS & Solaris (4.x and up to Solaris 10), Linux (kernel v 0.96 to present 2.6 kernel including distributions such as: YGDRASIL, Slackware, SuSE, Debian, RedHat including Fedora, EL 3.x and 4.x and SE Linux), AIX (4.x and 5.x), AUX, BSD UNIX, DG-UX, HP-UX (v 10, 11), Ultrix, Windows 95/98/NT/2K/XP, Mac, ...
<u>Hardware:</u>	Sun (Sparc, Netra, Ultra, Sun Fire and Enterprise) servers and workstations; Sun D series SAN storage arrays, RAID (hardware and software based), DG / EMC AViiON, HP 9000 servers and MSA series SAN storage arrays, IBM RS 6K and eServer pSeries, Compaq ProLiant servers, various consumer grade x86 systems, HA/cluster solutions, host bus adapters, switches, terminal servers, Fiber Channel, bridges, routers, UPS systems (APS), ITK/Telebit Netblazers, ...
<u>Internet Admin:</u>	Apache, iPlanet/Sun One web servers, TCP/IP, DNS, PKI, SSL, NIS, NIS+, firewalls and filters (hardware, software and kernel based), sendmail, milters, Cyrus, Procmail, LDAP/Directory, SET, Usenet News, AppleTalk, DHCP, Orbix, Proxies and Reverse Proxies, Internet Registries, ...
<u>Programming:</u>	PERL (v 4.x and 5.x), Unix shell (bourne, bourne again, korn, csh, tcsh, sed, awk), SQL, CGI, PHP (v 0.9 beta to 4.x), Java, JavaScript, C/C++, HTML, SGML / XML, Python, PostScript, Modula II, Oberon, Small Talk, SML, Fortran, Forth, Ada, Advanced Revelation, COBOL, COMOL, LISP, Scheme, ML, Prolog, RBase, Rexx/Arexx, BASIC, x86 and 68K Assembly, CORBA, ...
<u>Protocols:</u>	TCP/IP, HTTP, SSL, SMTP, IMAP, POP3, NAT, NFS, FTP, ICMP, UDP, SNMP, ARP, NNTP, RPC, LP, X11, LDAP, PPP, ATM, FDDI, ...
<u>Databases:</u>	DBA: MySQL 3.x and 4.x, Oracle 7 to 10g RAC, PostgreSQL, miniSQL, Sybase; OLAP; Advanced Revelation, OraPERL, PERL DBI, ODBC, Oracle OCI, ProC and SQL programming
<u>Applications:</u>	JBoss, WebSphere, Management Consoles, Veritas (File System, NetBackup, Volume Manager), PGP/GPG, afbackup, Amanda, rsync, rcs, cvs, ClearCase, make, ant, Solstice (Disk Suite and Backup), SATAN, tripwire, lsof, truss, SunVTS, sar,

Jumpstart, POVRay, GhostScript, Kermit, XYZModem, VNC, Citrix MetaFrame, MS Office & Project, PowerPoint, ...

Methodologies: Capacity Planning; Security Auditing; Computing Forensics; Business Continuity Planning; Capability Maturity Model; Systems Analysis, Systems Life Cycle; Procedural, Modular and Object Oriented (RAD/RD/XP/UML) Software Design; Software Development Life Cycle; ISO 9000; Business Process Reengineering (BPR);

PROFESSIONAL EXPERIENCE

Technical Lead for Global Resource Ministries International:

Employment dates: December 2002 to present

- Data, Network, Security and Systems Architecture and Administration for GRMI and LeVault
 - Administered Linux systems in a production environment
 - Red Hat 6 through 9
 - Red Hat Enterprise Linux 3.0 and 4.0
 - SE Linux (Fedora and Red Hat Enterprise Linux)
 - Provided installation and operations support for UNIX OS, software and hardware (consumer grade up to IBM eServer and Sun Enterprise hardware)
 - Provided overall network, systems and software architecture and design support
 - Enhanced and customized Open Source software with PERL and PHP
 - Automated tasks via PERL, Python and UNIX shell scripts (bourne, korn, C-shell, Turbo C-shell)
 - Opened and monitored vendor trouble tickets until resolved
 - Developed configuration management procedures for Systems Administration including version control and security
 - Provided for the monitoring of performance, resource utilization and security of Red Hat Linux systems and IP networks utilizing standard tools such as netcat, tcpdump, sar, snoop, watchdogs, etc... and custom built monitoring and reporting software
 - Built / Configured / maintained firewalls, gateways and proxy servers
 - Provided security audits including security awareness for internal and external clients
 - Provided for physical and electronic security and developing / enforcing related policies
 - Performed migration, upgrade and patch management and wrote associated documentation
 - Maintained Linux based storage systems including RAID and Volume Management
 - Built and managed disk and database backups for LAMP servers (Linux Apache MySQL PHP)
 - Installed, configured and maintained various Linux and Sun based services including CVS, bugzilla, PHP based portals, web services and applications (Apache, JBoss), MySQL, SAMBA, email list systems, IMAP and many others
 - Provided software development for proprietary projects, web applications and associated UNIX and DB utilities
 - Developed Web based DB reports generation and querying software
 - Managed system and database accounts
 - Linux
 - Oracle
 - MySQL
 - Windows and SAMBA
 - Performed Linux server hardening and tuning
 - Provided installation, maintenance and problem resolution (via troubleshooting or escalating) of OS, networks, software and hardware including
 - ARP to X25

- ACL's to zcat
- Apache to X509
- DIMMs to SCSI, ...
- Administered Linux based SMTP (email) servers and gateways including
 - Sieve filtering
 - Sendmail filters
 - AntiVirus software
 - AntiSPAM solutions
- Managed the DNS and internet registry for our domains / IP's and those of our clients
- Provided business continuity planning
- Built PKI utilizing products for GPG, X509, SSH and SSL
- Performed UNIX TCP/IP network troubleshooting for problems such as sequence number mismatch, DNS referral failures, firewall rule precedence, circular path discovery, etc...
- Performed capacity planning and resource budgeting
- Provided technical specs for internal and customer infrastructure
- Provided associated documentation and instruction for other staff and contractors
- Finished the development of a secure payment systems that was not completed by a consultant
- Facilitated data center builds and moves
- Participated in 24x7 on-call Operations support
- Consulting on Linux, Solaris, Windows and Oracle RAC HA solutions for ENS Health
 - Built Sunfire servers with Solaris 9
 - Built Compaq servers with Red Hat Linux
 - Provided OS tuning and hardening (Linux, Solaris and Win2K)
 - Installed and configured Java applications using JBoss on Solaris
 - Resolved various issues using UNIX tools such as sar, iostat, netstat, ndd, vmstat, pstack, pfiles, prstat, lsof, snoop, truss, etc ...
 - Installed Oracle 10g RAC on a Windows 2K Cluster and migrated their data and applications
 - Installed, configured, provided data migration and reporting for Oracle applications
 - Configured Compaq / HP storage arrays (SAN) in a Windows 2K Cluster environment
 - Host Bus Adapter configuration
 - Paths, zones, LUN's configuration
 - RAID configuration
 - Documented Solaris configuration procedures for client's switch to that OS
 - Tuned and tested both Windows, Linux and Solaris servers for client's web applications

Sr. Technical Associate for BEST Consulting / Venturi Technical Partners:

Employment dates: June 1999 to December 2002

- Provided Boeing with Unix (AIX, HP UX, Solaris and SunOS) Systems and Data Base Administration / Architecture support
 - Provided FTP/NFS/SSH/NIS/NIS+/sendmail/apache/Sun One/Orbix/WebSphere/... administration
 - Built many automation, reporting and monitoring utilities using, awk, sed, PERL and UNIX Shells
 - Prototyped entire data center installations via Jumpstart
 - Staged moving / consolidating production data centers into a single location
 - Provided for security and Patch management for production 24x7x365 environments
 - Provided Solaris installation, OS hardening and tuning training
 - Provided Systems Administration support for non-production heterogeneous data centers such as dev and test labs (Solaris - various, SunOS - Sparc, AIX - pSeries, HP UX - 9000's, Windows - *whatever*)

- Redesigned and deployed a large complex security, network, system & application infrastructure, (Oracle databases, Sun Enterprise servers, firewalls), effecting annual cost reductions of \$1 million
- Performed as the Sr. security guru advancing new (and old) security techniques within the organization
- Provided computing forensic analysis for legal proceedings in pending court cases
- Provided Sun hardware and OS troubleshooting for 2nd and 3rd tier support staff
 - Performed Solaris core file and running memory analysis
 - Discovered network library bugs and opened tickets with Sun
 - Diagnosed and remedied chip level failures with tools such as SunVTS
 - Directly resolved customer trouble tickets that got escalated to my level
- Regularly maintained a network of 200+ production Sun servers, clusters and domains
 - Maintained complex LP print services
 - Maintained mission critical UNIX servers
 - Assisted in providing 24x7 services across every time zone
 - Provided custom metrics software development and utilities
 - Delivered timely, efficient, reliable computing services for 100,000's of end users
 - Provided technical support including on-call
- Performed debugging and resolution of problems in PERL, UNIX Shell, JavaScript and JSP code in multi-tiered distributed environments
- Used and provided administration support for software development tools such as ClearCase
- Performed impact analysis for hardware, software and platform changes and OS upgrades
- Administered storage solutions
 - NetBackup
 - Sun Clustering
 - Hot, Warm and Cold backup spares
 - Veritas FS and VM, Sun Disk Suite, RAID and Volume Management
- Monitored performance on Sun servers and resolved various network, application and OS issues using tools such as sar, iostat, netstat, ndd, vmstat, pstack, pfiles, prstat, lsof, snoop, truss, etc ...
- Administered both Oracle (OFA and non-OFA) and Sybase databases
- Installed and maintained WebSphere (IBM) Java Applications
 - Java code caching
 - With DB connectors (and pooling)
 - JVM tuning and configuration
 - Deployment and configuration
- Designed automated software updating mechanisms on UNIX
- Provided tools for software deployment
- Deployed and administered virtual application serving via Citrix MetaFrame systems
- Provided mentoring for colleagues and junior staff
- Provided *white paper* like documents for Boeing's customers, suppliers and technical staff and management
- Proposed, designed and built a new and improved Solaris security environment that
 - Enforced ITAR and EARs regulations
 - Reduced software development and deployment costs by over \$20 million
 - Made use of RBAC and jailed (containers) environments for improved segregation and operational control
- Aided organization in moving up the CMM scale to the next level

Systems Administration Guild (SAGE):

Involvement dates: March 2000 to December 2002

- Designed a platform neutral (Windows or UNIX or Mac or ...) Systems Administration certification program for the guild
- Interviewed and provided directions for test question writers
- Participated in the Marketing team's campaign

Sr. Technical Architect for the Open Learning Agency (OLA):

Employment dates: April 1998 to June 1999

- Operated as the technical team lead for the organization covering the Sys Admin, Network, Help Desk and DBA staff
- Managed the technical aspects of a data center move
- Managed the move and consolidation of several offices into a single location
- Provided Solaris and SunOS systems administration (specializing in security, network, email, web and Oracle administration)
- Provided UNIX hardware, Network, UPS and backup administration
- Built and administered Linux based firewalls and routers
- Managed the DNS and internet registry for our domains
- Performed secondary Oracle 7/8 DBA duties (scripting, storage/TableSpace maintenance, importing/exporting, app monitoring, troubleshooting, ...)
- Designed a Web based (Solaris, Mac, Oracle) conference / symposium management system including
 - Scheduling
 - Kiosk accessible
 - Secure online payments
 - Web accessible database reporting
 - Financial reconciliation and reporting
 - Integrated printing solution for conference materials
- Developed and deployed the necessary B2B software and processes for secure financial transactions
- Provided IT planning, budgeting, recruiting, presentations, training
- Initiated and guided the organization through BPR (Business Process Reengineering) for improved efficiency
- Provided SGML implementation support

Consulting Partner with NorthWest Internet Solutions:

Involvement dates: January 1996 to October 1998

- Administered UNIX systems and peripherals including
 - Sun (Solaris)
 - AViiON (DG/EMC) running DG/UX
 - Linux (Debian, Slackware and Red Hat)
- Provided Unix, Windows and Web application development
- Managed the DNS and internet registry for our domains
- Developed specialized Windows NT based Internet Spider software that gathered EPA data from the Internet, (mostly using PERL on Windows NT)

Sr. Systems Administrator for the British Columbia Ministry of Education:

Employment dates: January 1996 to March 1998

- Supervised Development, Network and Systems Administration staff
- Provided hands-on administration of SunOS, BSD and AIX UNIX servers
- Administered SNMP based Network management software and associated systems

- Provided security / systems architecture for customers through several B2B endeavors,
- Served as technical lead integrating / consolidating various data centers, systems and networks
- Assisted in the development and implementation of Just-In-Time Publishing software, systems and procedures
- Developed CGI, PHP and ProC interfaces to Oracle databases
- Helped design, develop and deploy an Oracle data-mart on Sun Solaris servers
- Served on the job evaluation committee, aiding the organization as it became part of the Open Learning Agency
- Implemented a Corporate SSL Certifying Authority using SSLEAY (predecessor to OpenSSL)

Sr. Systems Analyst for the British Columbia Systems Corporation:

Employment dates: September 1993 to December 1995

- Team Lead for Sun Unix Systems Administration (Sparc/Ultra) with a user base of tens of thousands
- Supervised Network staff and Coop students
- Designed, and led the team that developed, web applications using PERL, SQL (Oracle), CGI, C, UNIX Shell and of course HTML
- Administered TCP/IP Networks including dialup, Ethernet, T1 and FDDI (Fiber)
- Installed and Maintained Sun's SAN disk storage arrays (RAID)
- Provided leadership and direction on Internet services, e-business and security
- Provided staff training on HTML, CGI, Java, Privacy, Security and other related technologies

Systems & Network Analyst for the Education Technology Centre:

Employment dates: June 1991 to August 1993

- Administered Sun UNIX (SunOS 4.x), Windows and Macintosh platforms with a user base of over 10,000 on the Sun Sparc servers
- Managed the DNS and internet registry for our domains
- Managed accounts, sendmail, disk quotas, NFS, Usenet on Sun Sparc servers running SunOS 4.x
- Developed Internet software for dialup audiences using mostly PERL, UNIX Shell scripting, GNU / FSF software and Windows/Mac scripts
- Provided development and admin support for UNIX based TCP/IP software such as gopher, Usenet, Freeport, sendmail, POP, Kermit, XYZModem, etc...
- Developed parsing and filtering software on IBM Mainframes and VAX Clusters

Data & PC Analyst for the Ministry of Regional and Economic Development:

Employment dates: May 1990 to December 1990

- Implemented an Advanced Revelation database system
- Maintained computer backups
- Provided general Internet, WANG, PROFS and PC technical support

AFFILIATIONS

A contributing member of the Systems Administrators Guild

<http://www.sage.org/>

A contributing member of USENIX

<http://www.usenix.org/>

CONTRIBUTIONS TO THE NET & OPEN SOURCE

- Built publicly available search engines (WAIS based mostly), before there was such thing as Google
- Reported bugs to Sun Microsystems and Red Hat – some still broken though:-(

- Reported bugs on several Open Source products such as GPG, gotmail and SpamAssassin and provided patches to fix those bugs, (some have been incorporated into the official source code)
- Provided the initial NCSA/Apache PKI example CGI's and documentation for building an SSL Certifying Authority via SSLEAY (precursor to OpenSSL)
- Developed one of the first Usenet News / Web gateways via CGI
- Developed possibly the first auto-updating services for UNIX based software
- Enhanced several existing features and plugins within the SquirrelMail project on <http://sourceforge.net>
- Provided PHP and Web programming tutorials
- Built one of the first PHP based generic web interfaces to an Oracle RDBMS
- Gave interviews and provided information, opinions and quotes for print-based and on-line technical journal articles
- Gave a few technical presentations at various technical and non-technical conferences
- Assisted in the development of a platform independent Certification Program for System Administrators

REFERENCES

Available upon request