

Steven B. Dunham

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Summary

I have a diverse background ranging from theoretical computer science to systems administration. I tend to be a jack of all trades, doing whatever needs to be done. I enjoy learning new technologies and skills, solving problems, and leveraging computer technology to make people's jobs easier.

I'm looking for a Software Engineering position where I can apply my skills to design and write software and further develop my skills and knowledge base.

Education

MICHIGAN STATE UNIVERSITY

1997-1999

Master of Science in Computer Science

1994-1997

Master of Science in Mathematics

1990-1994

Bachelor of Science in Mathematics

Work Experience

SYSTEMS RESEARCH AND DEVELOPMENT

Las Vegas, NV

2003-current

Member of Technical Staff

- Designed and implemented a C++ database abstraction layer modeled on JDBC.
- Implemented prototype of next generation of our product, a Database entity resolution system that uses cryptographic techniques to assure anonymity.
- Designed and implemented various Java applications that imported and exported data from databases and talked to IBM MQ Queues.
- Helped turn the prototype into a product.
- Helped with IT support of Linux, Solaris, and Windows servers.
- Supported SAN systems and Oracle database servers.
- Authored a pending patent.

SITEROCK CORPORATION

Emeryville, CA

1999-2002

Software Engineer

- Reimplemented a Remedy based ticketing system in TSQL and C++.
 - Wrote two multithreaded windows services in C++ that interfaced to the Database via SQL and an extended stored procedure written in C.
 - Implemented the ticketing system logic in TSQL stored procedures.
- Helped design and implement a web interface and backend for configuring customer data and alert processing/acquisition for the ticketing system.
 - Made technology choices for the development platform.

- Designed and implemented XML and relational data models and database abstraction layer.
- Implemented XSL transforms to translate XML marked up instructions for ticket processing into HTML and other formats.
- Reimplemented the business logic layer of the web application to significantly boost performance.
- Helped rewrite the presentation layer XSP/XSLT code to boost performance and correct bugs.
- Handled deployment and production maintenance of the application.
- Helped Provide customer support for the application.
- Reimplemented a telemetry data acquisition system as a standalone Java application.
 - Improved performance, reliability, and ease of configuration
- Helped design and implement an alarm aggregation system in Perl
- Designed and implement a alarm aggregation system in Java
 - Improved performance and reliability.
 - Improved fault-tolerance and load balancing.
- Setup infrastructure for automated server builds.
- Design and implement the build and release process for in-house software
- Helped design and implement Linux-based monitoring servers.
- Implemented and deployed new mail and DNS infrastructure.
- Supported production systems running the ticketing application, web application, mail servers and DNS servers.
- Helped debug customers mail and DNS problems.
- Maintained network consisting of Cisco equipment and Netscreen VPN appliances.

MSU DEPARTMENT OF COMPUTER SCIENCE
1997-1999

East Lansing, MI

Graduate Assistant (Student Systems Administrator)

- Helped administer a network of about 200 Sparcs, SGIs, Linux and NT machines.
- Diagnosed and repaired hardware, network, and software problems for the above systems.
- Setup and maintained NFS, NIS, automount, WWW, DHCP, and FTP servers.
- Installed Sybase 11, MySql, and Postgres database servers.
- Tested new versions of Solaris and integrated into our automated install system.
- Setup automated Red Hat Linux install using Kickstart.
- Ported our Jumpstart configuration to newer version of Solaris
- Setup automated NT install.
- Upgraded and installed third party software.
- Setup Linux, Solaris and NT workstations. (Including software, hardware, and network setup.)
- Setup Linux and Solaris servers.
- Helped with network administration (basic Cisco IOS experience, troubleshooting, and fire-wall maintenance).
- Implemented machine database using Perl and PHP3 with MySql and LDAP backends.
- Maintained shell and Perl scripts used to administer the system.
- Provided ongoing support to users.

MSU DEPARTMENT OF MATHEMATICS
1994-1997

East Lansing, MI

Graduate Teaching Assistant

- Taught undergraduate mathematics classes; responsibilities ranged from running an entire class to doing recitation sections.

STATE OF MICHIGAN, SECRETARY OF STATE
Summer 1995

Lansing, MI

Summer Intern

- Wrote graphical application to automate a paper-based forms submission process.

DEBIAN LINUX

1996-Present

Developer

- Create and maintain software packages
- Handle bug reports for my packages
- Ported UltraSparc support to Debian Linux, managed the X server patches for Sparc
- Managed the Sparc release of Debian Linux 2.1

Software Development Experience

- Experience writing Java web and database applications using J2EE (JBoss), Struts, Cocoon, XSLT, XSP, XML, EJB, JDBC, and JSP technologies.
- Strong experience programming in Java (5 yrs), Perl (5 yrs), SQL (5 yrs), C (12 yrs), and C++ (5 yrs).
- Some experience programming in Common Lisp, Scheme, ELisp, Smalltalk, OCaml, Python, Fortran, TCL/TK, Bash, Visual Basic, and assembly language.
- Experience debugging and enhancing C, C++, Perl, Java, and Lisp Software written by others.

Systems Administration Experience

- Setup automated installs of Linux, Solaris, and NT.
- Built Solaris, RedHat Linux, and Debian Linux packages
- Configured NFS, NIS, DNS (Bind9), and Sendmail
- Worked with Solaris (8 yrs), Linux (8 yrs), IRIX (3 yrs), NextStep (3 yrs)