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Summary

Senior-level PostgreSQL database architect and developer with wide range of experience. Strong and diverse technical, organizational, and planning skills. Honest, ethical, resourceful, and dedicated; committed to doing the best job possible. Enjoys leading small teams, or handling any size of project independently. Seeking employment in an environment which values good design and efficiency, where a lasting positive difference may be made.

Qualification Overview

Project Management

- Managed small teams of developers with diverse skillsets.
- Planned, designed, and managed development of internal and client-facing applications.
- Evaluated business needs and causes of issues to determine best plans for moving forward.
- Deployed and maintained solutions to add scalability, fail-safety, higher efficiency and performance.
- Created development roadmaps and timelines for handling projects according to schedule.

Database Design

- Deep understanding of complex SQL, stored procedures, tuning, and advanced database capabilities.
- Designed database schemas for high-performance and space-efficient applications.
- Designed and maintained wide variety of database-driven applications.
- Especially expert with PostgreSQL and related technologies.
- Abstracted database structures from applications through views, stored procedures, and custom frameworks.
- **Databases:** *PostgreSQL, IBM DB2, Microsoft SQL, SQLite, Oracle, MySQL, InterSystems Caché*...

Development & Design

- Strong ability to identify design limitations, security issues, and performance implications.
- Comfortable combining information from heterogeneous data sources.
- Designed systems and interfaces for data collection, reporting, incident processing, content management, etc.
- Authored documentation of business software and products.
- Designed database-based statistics and graphing reports.
- **Languages:** *Perl, PHP, Ruby, HTML, UNIX Shell Scripting, Java, C, C++, Objective C, Python*...

System Administration

- Setup and administered production services for website hosting, E-Mail, FTP, DNS, etc.
- Implemented redundant server and storage solutions for failsafe services.
- Designed and implemented networks, server, and desktop solutions for offices.
- Implemented and heavily customized service monitoring applications.
- Wrote tools to automate tasks, statistic updates, and network backups.
- **Operating Systems:** *OpenBSD, Linux, FreeBSD, Mac OS X, Solaris*...

Security

- Performed network intrusion detection/prevention including packet-level and pattern analysis.
- Audited and corrected code to protect it against SQL injection attacks and other vulnerabilities.
- Developed analyst interface for network vulnerability assessment product.
- Familiar with traffic monitoring, filtering, diagnostics of network issues and, identifying security issues.
- Knowledge of advanced UNIX/Linux and network security measures.

Employment History

(contact information available upon request)

Database Administrator

The Salvation Army (<http://salvationarmy.org>)
Indianapolis, IN; September 2009 - Present

- Used SOAP web services to submit data from internal CMS system to state government.
- Wrote tools using Perl and PostgreSQL for internal reporting to enable staff to provide better service to clients.
- Reworked and improved network hardware and services.
- Implemented automated backup solution for Linux and Windows servers.
- Designed new CMS/patient record system using Perl and PostgreSQL.

Database Architect

The Berkeley Electronic Press (<http://bepress.com>)
Berkeley, CA; March 2008 - October 2008

- Wrote data management framework in Perl (query management, result caching, & unified access).
- Addressed major performance issues impacting production performance and developer productivity.
- Refactored database schema and deployed these changes in multiple environments with an automated approach.
- Implemented change management system to fully control and document changes to production servers.
- Refactored SQL to allow upgrading to newer PostgreSQL versions cleanly.
- Refactored code to remove embedded SQL for easier management.
- Set up production servers utilizing DRBD for synchronously-replicated data for high availability.

Database Applications Engineer

Hi5 Networks (<http://hi5.com>)
San Francisco, CA; December 2007 - March 2008

- Performed large volumes of data correction and transformation.
- Worked with other teams who needed to work on exported data and later import changes.
- Performed performance tests and made appropriate tuning for improvements.
- Wrote various scripts and automation utilities in Ruby and Perl.
- Executed changes in production environment, coordinated with application deployments.
- Tested and documented change steps for planned database schema changes.
- Modified Java code to use database more efficiently.
- Fulfilled reporting needs from other departments of company.

Lead Developer

Spry Hosting (<http://spry.com>)
Renton, WA; November 2006 - May 2007

- Designed and managed development of a wide variety of small projects.
- Built PHP/PostgreSQL-based reporting interface to display information from heterogeneous data sources.
- Designed and co-authored Perl/MySQL-based dynamic content management framework.
- Built hardware and configuration database and management system based on the above framework.
- Wrote various utilities using Perl, PHP and database stored procedures.
- Modified existing applications to add capabilities, improve maintainability, and increase performance.
- Wrote templating system for main website and updated code to be XHTML 1.1 compliant.

Network Administrator & Developer

SeattleServer.com, inc. (<http://seattleserver.com>)
Seattle, WA; July 2004 - July 2007

- Built infrastructure to support very little human time needed to administer a large quantity of servers.
- Replaced entire aging infrastructure with new systems, migrating all data and services without downtime.
- Setup and administered server applications (databases, web servers, DNS, E-mail service, spam/virus filtering, FTP...).
- Greatly increased scalability of company through efficient design.
- Developed reporting and administrative tools for staff and clients based on Perl, PHP, Ruby, and PostgreSQL.
- Performed migrations of applications and data between MySQL and PostgreSQL.
- Performed on-site consulting work for other companies.
- Built complex E-mail filtration system at the SMTP level using Exim and PostgreSQL.

Employment History (*continued*)

Systems Administrator

*NewBay Software (contracting for T-Mobile) (<http://newbay.com>)
Snogualmie, WA; July 2004 - February 2005*

- Responsible for uptime of an offsite seven machine cluster running a large Java/MySQL application.
 - Configured and extended Nagios monitoring software.
 - Wrote Shell, Perl, and SQL-based scripts used for monitoring, reporting, and common tasks.
 - Researched problems and reported software issues to developers (QA).
 - Performed upgrades to new releases during maintenance windows.
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Database Developer & Report Writer

*AirDefense (contract) (<http://airdefense.net>)
Atlanta, GA; January - April 2004*

- Designed executive reports for clients using Crystal Reports.
 - Designed application to transfer data to dedicated reporting database, to minimize impact on production database.
 - Created application for replicating data between different database platforms.
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Systems Architect

*Open Source Software Solutions (<http://osss.net>)
Atlanta, GA; November 2002 - April 2004*

- Designed and implemented Linux-based networks, using Windows NT Terminal Server and Linux clients for the most cost-effective Windows desktop access.
 - Configured Samba/Linux to act as a primary domain controller and file server for Windows networks.
 - Used IPTables/Linux to setup firewalls for large internal networks.
 - Configured VPN servers (PPTP & IPSec) for remote user network access.
 - Configured Linux-based E-mail servers with web-based access, mailing lists, and spam filtering.
 - Designed PostgreSQL-based complex website for real estate agency with an administrative interface to allow the client to easily update their site.
 - Set up FTP, DNS, Web, and services, using Apache, DJBDNS, Pure-FTPd, and others.
 - Worked with Brainbench to finalize new Linux administration tests.
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Developer & Security Analyst

*SecureWorks (<http://secureworks.com>)
Atlanta, GA; August 2001 - March 2003*

- Analyzed packet logs to determine whether suspicious/blocked traffic was actually malicious.
 - Wrote PostgreSQL/Perl utility to automatically send important E-mail notifications to client to eliminate human error.
 - Wrote PostgreSQL/PHP-based application for trouble ticket processing, metrics and sales reporting, and more, combining information from heterogeneous data sources.
 - Used TCPdump, NMap, Snort, IPTables, and other network analysis tools on a daily basis.
 - Became intimately familiar with general network security issues.
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QA Engineer

*Cabot Corporation (contract) (<http://cabot-corp.com>)
Alpharetta, GA; 2000 - 2001*

- Verified data integrity and accuracy during migration of data from an AS/400 to Microsoft SQL.
 - Worked in a self-managed environment, given several months worth of work in advance and completing it ahead of schedule.
 - Developed a good sense of quality control, becoming able to easily identify and correct flaws.
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For recommendations and further verification, please see my LinkedIn Profile (<http://www.linkedin.com/in/cshobe>).
This document was last updated on 02 July 2010. The latest version may be found at <http://casey.shobe.info/documents/resume/>.