David Stanton White

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SUMMARY OF QUALIFICATIONS:

Highly proficient in Web-based programming and technologies. Experienced in Linux/Unix system administration. Skilled in developing creative solutions to problems using a variety of programming languages. Proficient in designing clear, intuitive user-interfaces. Demonstrated ability to solve problems with little or no guidance. Comfortable working individually or within a team. Skilled at writing robust, well-documented, customizable, easily-maintainable programs. Dependable, conscientious employee who enjoys helping people solve their problems.

AREAS OF EXPERTISE:

Languages: PHP, Perl, HTML/DHTML, CSS, JavaScript, Unix shell scripting, SQL, TCL

Web Servers/Environments: Apache, Pentaho, Microsoft IIS, MediaWiki, WordPress, Vignette StoryServer 4.2/5.0

Databases: MySQL, Oracle, Microsoft SQL Server, Microsoft Access

Operating Systems: Linux (Ubuntu, Red Hat, Debian, Gentoo), Solaris 8, Digital UNIX, Windows, MacOS, DOS, VMS

Graphic Applications: Macromedia Fireworks, Adobe Photoshop, Adobe Illustrator

PROFESSIONAL EXPERIENCE:

Software Engineer, Cisco Security Incident Response Team, Research Triangle Park, NC, April, 2014 – present. Developed new applications and enhanced existing tools to block and mitigate cyber threats to Cisco and Cisco's business partners. Worked with the CSIRT analysis and investigation team to enhance existing applications that are critical to identifying and blocking compromised Internet hosts, malware distribution sites, and infected PCs. Wrote automation tools to simplify common tasks.

Lab Tools Developer, Cisco Systems, Research Triangle Park, NC, May, 2010 – April 2014.
Integrated HR and Remedy Oracle databases and SOAP services with a variety of PHP-based applications to support Cisco's lab environments worldwide. Enhanced existing tools to pull trouble-ticket data from multiple sources and display them in a single dashboard for metrics reporting. Created over a dozen ETL processes in Pentaho and PHP to automate information gathering from a variety of Cisco sources (including databases, Excel files, CSV files, and JSON web services) and store them for metrics purposes. Built and administered a number of Linux-based VMs.

Senior Programmer Analyst, Madison River (later CenturyLink), Mebane, NC, September, 2001 – December, 2009. Performed requirement analysis, prototyping, development, and maintenance of applications written in PHP, Perl and MySQL to support CenturyLink's Network Operations groups. Installed and customized open-source applications such as Routers2 and dotProject. Performed system administration tasks on a variety of Solaris- and Linux-based systems.

- One web-based application was a Knowledge Base tool, integrated with Netcool. With a single click, a Netcool operator could immediately look up information about an alarm code, see a list of maintenance going on in that state, access any Wiki information associated with the alarm code, and see a history of related Remedy trouble tickets.

- One application, written in PHP and MySQL, served as the shiftlog system for the Network Operations Center. Multiple users were able to logon simultaneously in order to update the status of all trouble tickets they were working on. These updates could be publicly viewed, or kept viewable internally only. Shiftlog reports could be produced at any time in HTML, text, or dynamically-generated Excel format via a Perl application.

- Another PHP application was built to create a central repository for Ethernet topology maps. This replaced a disorganized system of non-standard documents with a single MySQL-driven web application where maps could be uploaded, categorized by state, tied in with a separate VLAN database, and accessed via a simple and intuitive user interface.

- Built a video-sharing site for the local communities served by Madison River's ISPs consisting of a website, database, user-authentication system and other applications. It was designed to enable customers to login, upload and tag their videos, and have them posted on a video-sharing community site after moderator approval.

- Created a set of customer portal websites for Madison River's ISP locations using Perl, PHP, JavaScript, CSS and MySQL. The new portal sites included news feeds, local weather, and a stock quote lookup tool. Contracted with a news provider to send a news feed to the portal sites every 15 minutes. This took a simple welcome page and replaced it with a sticky, marketing-ready site full of useful content to encourage customers to make this their home page.

- Created a database-driven context-sensitive menu navigation system for Madison River's corporate websites, which generated a customized hierarchical navigation menu based on the webpage being viewed. This replaced a redundant, error-prone system of manually customizing each page on the corporate site with necessary navigation links.

System Administrator and Web Developer, Grace Reformed Baptist Church, Mebane, NC. March, 1997 – present. (part-time independent consulting)
Engineered solutions to meet the needs of a growing church that wanted to provide on-demand streaming for over ten years worth of audio sermons, offer live audio/video broadcasts of services, add podcasting and blogging features to their website. Created and administered systems to provide the church with web, mail, audio/video and firewall services. To accomplish this, there are several aspects to this consulting position:

Web Developer

- Designed a new website using a combination of PHP, Perl, JavaScript, HTML, CSS, and graphics created in Fireworks and Photoshop. Built a MySQL database and custom-made search engine to allow easy access to over ten years' worth of online audio sermon files. Installed WordPress and customized a template for blog postings. Built a members-only online directory application which allows members to login and update their directory listing.

System Administrator

- Administered the original website's Windows NT IIS server. Migrated the website to Linux server at the church. Configured the Linux server as a web server (Apache), file server (Samba), mail server (Postfix) and internet/NAT gateway (iptables). Installed Helix Server for RealAudio file streaming and Adobe Flash Media Live Encoder for video streaming. Responsible for the updating and daily maintenance of the server.

- Recompiled the kernel and wrote scripts to manage network traffic shaping on the box, to ensure that certain visitors (i.e. those streaming audio or video sermons) have a higher bandwidth priority over other visitors (i.e. those who are downloading large files).

- Configured a modem on the Linux server to perform two tasks. First, it received incoming faxes and printed them out on a printer shared by a Windows XP machine, via Samba. Second, it allowed people to establish a dial-up connection with the server for Internet access. This allowed the server to function as a mini-ISP and eliminated the need for our pastors to pay for ISP connections.

- Configured an OSS backup solution to perform daily incremental and weekly full backups of the Linux server and all office PCs via SMB or rsync.

Security Administrator

Due to the sensitive work done by one of our church's missionaries, it is necessary for him to communicate with us in a discreet, secure fashion. With these requirements, I engineered the following solutions:

- Implemented a website related to the missionary's line of work. Within that site, an unlinked, password-protected, SSL-encrypted web page allows the missionary to access a small portal page, containing links to SquirrelMail (for IMAP e-mail), a CGI-based web proxy, and other tools that allow him to communicate with us without leaving the confines of the work-related website. This provides high security in a discreet manner.

- Setup an OpenVPN server which allows him to make a VPN connection to our server and do any number of Internet-related tasks, again in a secure manner. Routing Skype/Gizmo traffic over the VPN also allows him to make secure VoIP calls to us.

- Configured iptables as a firewall on both the missionary's server and the church Linux server. In the case of the church server, iptables also serves as a NAT router.

Senior Developer, **E-commerce division**, Interpath Communications, Raleigh, NC. March, 2000 – September, 2001.
Performed requirement analysis, prototyping, development, and maintenance of applications written in Perl and MySQL, and TCL using Vignette StoryServer 5 and SQL Server on the back end.

- One application, written in Perl, processed the website changes a customer sent to us 2-5 times a day. The script would receive a ZIP file (uploaded via the Web), extract and install the files, and e-mail the sender a summary of the processing. All information was logged and errors were caught and handled gracefully. This eliminated the need to manually process these files, which generally took 30-90 minutes each day.

Web Manager, Blue Cross Blue Shield, Chapel Hill, NC. July, 1999 – March, 2000.
Responsible for the development and daily maintenance of the corporate intranet. Wrote custom Perl CGI applications and UNIX tools for multiple departments within the company.

Senior Information Technology Analyst, Persimmon IT, Inc., Durham, NC. June, 1996 – May, 1999.
Responsible for the design, building, content creation, and maintenance of many clients' websites. Wrote CGI applications and a number of custom tools using TCL, Perl, JavaScript, UNIX shell scripts, PHP, and C. Installed and customized Apache, Microsoft IIS, Netscape, and proprietary web servers. Integrated websites and databases to build customer login and problem tracking applications.

- Designed, developed, and implemented a web-based timecard program. This replaced a paper timesheet system in which employees manually added up the number of hours worked on a project and personally kept count of the number of time-off days used.

- Consulted with Persimmon's Validation Manager to create a web-based document review system, written in PHP and using a MySQL database, which replaced the informal method of e-mailing and manually tracking any documents that needed to be reviewed.

- Engineered a database-driven user authentication system. The project included support for authentication based on group membership, and administrative tools to easily add, modify, or delete users. This system was used on several websites where access needed to be restricted to certain people or groups, and where hundreds of user and group accounts needed to be easily managed.

Independent Consultant.
Established a business offering a number of services including web design and programming, disk repair, hardware installation and repair, virus removal, and training.

EDUCATION:
    Bachelors, Information and Computer Science, Covenant College, Lookout Mtn., GA. Graduated *magna cum laude*.

HONORS AND ACHIEVEMENTS:
    National Merit Scholarship recipient.
    Covenant College Merit Scholarship recipient.
    Dean's List - 1991, 1994-1995.