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Gilbert Heaton  
Status: Immediate  
U.S. Citizen

Top 2019 20% poster at  
<http://stackoverflow.com/users/693294/gilbert>

Senior POSIX Software  
Engineer, including  
perl, web, php, scripting,  
and data exchanges.

## PROFESSIONAL SUMMARY

Primarily software development but seriously supporting the business in other ways. Have contributed to information flow across corporate and customer cultures. Also enjoys writing documentation and requirements gathering and has produced a broad spectrum of documentation. Willing to take on and improve “not fun” legacy applications.

## ACTION ARENAS

- Heavy software development or testing, unit testing, packaging, and associated local system administration.
- Includes out of sight non-web applications, infrastructure work, back end web servers, and some front end web work.
- Additional desirable duties include facilitating communications, coordinating between different departments, team leadership, technical leadership, some project management, requirements gathering, advanced customer support, and training.

## TECHNICAL SUMMARY

- **Duties include:** Software development and support from new development through improving legacy applications in the family of UNIX and Linux environments. Have also worked in Microsoft Windows development. Have the staying power to take on long-term “not fun” projects.
- **Arenas include:** business infrastructure, telecommunications, network applications, network security, help desk solutions, publishing, point of sale, technical support, and presales support.
- **Exceptional languages include:** C, shell scripting, OO perl-5, SQL, HTML-4/CSS-2.
- **Operating Systems include:** Linux distributions, commercial UNIX products and some BSDs, Windows-7 and Windows Servers.
- **Methodologies used include:** Agile, SCRUM, code reviews, JIRA ticketing, automated testing, TDD ( Test Driven Development), BDD ( Behavior Driven Development), DevOps.

## ADDITIONAL DETAILS

- **Databases include:** normal and embedded SQL, MySQL, Oracle, PostgreSQL, MS SQL Server, Informix.
- **Recent Languages include:** shell scripts, perl, C, SQL, perl,
- **Operating Systems include:** Solaris, Linux (CentOS, Red Hat, Fedora, Debian, Ubuntu, Mint), UNIX (HP-UX, AIX), and POSIX standards. Some BSDs, Windows-7 and down, and Windows Servers.
- **Languages in detail include:** shell scripts (bash, ksh, sh, zsh, awk, find, sed, grep, sort, tac, ....). multithreaded C and perl, PHP (composer, framework, php-4 through php-5.5 OO)
- **Development tools include:** cmake, make/vi, Eclipse, PhpStorm, vagrant, and more.
- **Network and Web include:** Apache and ISS web servers, TCP/IP, ssh, scp, sshfs/libfuse, nmap and NSE scripts, HTML (through HTML-4, some HTML-5, CSS), JavaScript).
- **Source Control Management:** AccuRev, git, Subversion, CVS, ClearCase, RCS, SCCS.
- **Virtualizers:** Virtual Box, VMWare Server, VMWare Player, Xen, Microsoft, A W S.
- **Personally use:** Linux, Windows, Apache, cgi-bin, perl-5, PHP, C, C++, git, github, Subversion, Libre Office suite, Microsoft Office suite, rich variety of shell commands and scripts, ssh, sshfs.

## PROFESSIONAL POSITIONS INCLUDE

### Internal processes improvements and cost reductions:

- Verizon Wireless (2019-Oct present):
  - Reduce mail and SMS errors from in-store pickup server.
  - Reduce logged activation errors by an order of magnitude.
  - Reducing billing problems in warehouse billing by \$100K.
  - Ongoing enhancements, maintenance, and bug fixes, on around a dozen server applications, and still learning more.
  - Tools to make reports and quickly analyze/solve problems.
- Vonage (2016-Mar to 2016-July): closed confusion gap by documented what I discovered the hard way.
- Kforce (2016-Mar to 2016-May): Delivered project documentation and delivery bundle despite unstable requirements being given in final two weeks.
- IDT (2015-Nov to 2016-Jan): automated building of delivery bundles using Makefiles and shell scripts. Reduced build and publication of development release time to minutes.
- AT&T (2013-June to 2015-Sep):
  - Reduced time for hourly report from over one-hour to under 40 minutes by using distributed processing.
  - Automated error prone manual processes for adding users to various systems reducing over an hour of work to under 15 minutes.
  - Reduced dev environment installations from three to four hours to under fifteen minutes.
- Verizon Wireless (2011-Mar 2013-May):
  - Reduced by at least 25% time consumed in maintaining virtual warehouse database and software used to mark virtual phones as shipped for test orders from testers and developers. One difficulty was the virtual inventory model numbers had to come from constantly changing physical numbers.
  - Created cgi-bin under HTTPi web server to return status test orders and virtual test warehouse as seen by back-end system. Efficiency of testers increased enough for one team lead to nominate me for employee of the year.
- Avaya (2008-Jan to 2008-Jul): completed primary assignment early enough to be kept till end of contract for other work, such as automating updates from vendor FTP server and looking to improve Apache webserver performance.
- Lumeta (2004-Mar to 2006-Jul):
  - Subject Matter Expert in perl, shell scripts, C, CVS, and FreeBSD sysinstalls.
  - Split services on central sever across multiple servers in different security zones both to improve performance and get reports from previously unreachable systems. Implemented mod\_perl and apache modules to get security access.
  - Evolved manual build instructions over time to the point it became a fully automated build system by addressing one pain point at a time. Started evolving PHP web server to monitor then control builds.
  - Enhanced PXE loader used in development labs to reduce overhead by at least 10 minutes for frequent installs. Manual administration of PXE boot system was reduced as build system published new builds.

### Customer experience improvements:

- Verizon Wireless (2019-Oct present):
  - Reduce mail and SMS errors from in-store pickup server.
  - Reduce issues with In Store Pickup orders and improve emails.
- Numara: Diagnosed and fixed critical, and highly high visibility, severity-1 & 2 issues at major customers.
- Lumeta: became the first developer to ever bring field upgrades to the level of success my upgrades did.

### Other difficult solutions

- AT&T: high volume, high performance, large distributed and clustered applications. Over a petabyte a day on largest application.

- Verizon Wireless 2018:
  - Helped migrate back end inventory movements and much billing from home-built systems to SAP front end.
  - Repeatedly assigned difficult and brittle legacy applications.
- Verizon Wireless 2016:
  - High performance back end database (15+million transactions/day) and communication requirements.
  - Reduced VMS to UNIX migration time by writing migration tools and VMS calls library.

**Documentation:**

- Includes internal deep technical documentation up to customer and user documentation. From deep technical to high level documentation and requirements gathering.
- Repeatedly reduced learning curves of new personnel by reducing discovery curves from general onboarding to software development.
- Reduced time lost to out of date technical documentation. Both internally and at customer sites.

**EDUCATION:**

California State Fullerton: Computer Science 1974

Fullerton College: Electrical Engineering 1970