

# Gilbert Heaton ; Sr. Perl & Scripts Software Engineer; SQL, Backend, Linux, UNIX

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Availability: Contract ending. Employment Authorization: US Citizen. Security level: none but can apply.

Web links: <http://stackoverflow.com/users/693294/gilbert> top 13% poster; Github: <https://github.com/GilbertsHub>

## SUMMARY:

COVID-19 statement: currently favoring REMOTE positions that remain remote after COVID-19 issues resolve to scientific satisfaction. Will consider commutes again for right job once COVID-19 dims.

Out of box thinker to solve problems. Recruiters should visit <http://resume.heaton/Foyer.php>.

Experienced egoless senior perl developer with recent focuses on backend UNIX and Linux environments. Also currently expert in C and UNIX shells. Used to remote distributed teams across corporate structures with technical and non-technical people. Professionally raised in a culture of teamwork and customer support. development. in different arenas and with diverse software experiences over the full SDLC from requirements gathering, product architecture, documentation, implementation, installation and training.

## SKILLS LIST:

*Expert:* perl-5 (Object Oriented, POD), Linux, UNIX, shell scripting (bash, ksh, gawk, awk), C, Oracle SQL.

*Strong:* perl packages (Template Toolkit, CGI, CPAN) and mod\_perl, MySQL, XML, SOAP. UNIX compilers, GCC toolchain, Fair: PHP, EDI. AutoSys remote client scripts.

*Intermediate:* JavaScript, HTML/CSS, PHP, Restful APIs, various MQs, git, EDI X20, VirtualBox, VMware.

*Analysis:* Delights in working out logic to new or failing programs and attention to details to work it out.

*Long-term:* Distributed applications, distributed programming, clustered systems, debugging distributed applications, heavy multiprocessing, globally distributed teams. Documentation and mentoring. Web meeting and chat tools. Learning and changing mind based on new knowledge.

*Web tools:* Atlassian Bitbucket, Confluence and Jira. Other tools include Jenkins and Gitlab.

Special note: aware of 2038 problem and solutions (was technical admin and tech lead for AT&T Labs Y2K).

Partly remote to fully remote positions.

## EMPLOYMENT HISTORY:

***Energy Harbor; Remote ; Mar-2020 to present; 100% remote*** via DXC Technology via BC Forward

Job Title: Sr. Linux Shell scripting consultant in energy market.. Approaching end of current contract period.

Skills: bash, ksh, csh, perl, RHEL, Oracle SQL, Apache configurations. Chaotic environment.

Helped finish migration phase of customer application suites from AIX to Linux environments.

- Helped finish migration phase of custom AutoSys scripts suites from AIX to Linux environments due to original company splitting in two and needing to migrate modified environment by “lift and shift” and Greenfield server deployments. This included continuous discovery of new requirements and servers
- Discovering and documenting layout in large undocumented code base.
- Mostly worked on remote client AutoSys scripts driving PowerCenter operations.
- Writing scripts to scan code base for candidates for change and automating changes.
- Partnered with sysadmins to push past multiple migration blockages.
- Bringing some automated tests to environment without any.
- On my own found a number of errors left in scripts migrated to production and proposed fixes.
- Documenting and mentoring and making notes for moving changes to production.
- Helping migrate AutoSys scripts running PowerCenter workflows from AIX to RedHat RHEL. No workflow administration.

***Estee Lauder Aveda Brand ; Manhattan NY Remote; May-2019 to Oct RIF; 90% remote***

Job Title: Senior Perl backend Developer (consultant); Position Estée Lauder Aveda brand loyalty.

Skills: perl-5, mod\_perl, Apache, templates, MVC, HTML, Oracle SQL, REST APIs, JSON, shell scripts, git, and Jenkins. Atlassian tools including Confluence, Jira, and Bitbucket.

- Helped to finalize migration of customer experience REST API with JSON payloads from historic vendor to a new vendor.
- Researched and fixed bugs in MVC “perlgem” perl code base and templates.
- Changed perl code and HTML templates adding customer visible features and pure perl for backend enhancements.
- Used Chrome Developer Tools to study resulting web pages and CSS cascades.
- Modified shipping email to stop customer shipping notifications while members are suspended.
- Debugged and tested RESTful API and code. Use of POSTMAN application to test.
- Greatly improved efficiency of searching and extracting large log files for failure information, or prove lack of same. File format and other considerations made this a non-trivial task where simple greps were useless.
- Researched very legacy perl-5 code for bug fixes and enhancements where people were not available to tell me what to look for.
- Deduced that extra reward points being added to customers were from third-party mobile application with enough evidence to push ticket onto them using above perl log reader application and gleaned details to help them isolate problem.
- Proposed API changes to stop painfully expensive issues from continuing.
- Documented procedures and information needed to properly do work to reduce future losses in time.
- Have references for this position.

**Verizon Wireless ; Piscataway NJ ; Oct-2016 to Apr-2019 ;** via Datanomics ; Red Bank NJ

Job Title: C Software Engineer (consultant); Position: Point Of Sale backend C and PRO\*C Developer

Skills: C (data structures), Solaris CC compiler and dbx, Oracle SQL, Solaris, shell scripts, perl, SOAP, RESTful APIs, HTML, MQ, Jira, git, and Jenkins. Agile development with Atlassian tools including Confluence, Jira, and Bitbucket.

- Worked on distributed C applications within the backend spread across regional server clusters.
- Completed difficult migration of warehouse and inventory control from legacy platform to SAP-based system using XML API.
- Used logs to find timing issues, mismatched orders, corrupted data, and other difficult to track events.
- Perl-5 code, lots of it, to scrape logs and generate sample data to support other operations, Perl code was behind multiple reports being emailed out to different front-line and management level people.
- Implemented BE code for new multi-device trade-in option using complex SQL to work within the existing DB and legacy code and consolidating shipping to save money.
- Improved store pickup processing for better customer and manager experiences. This included improving emailing to properly handle time zones of stores and customers rather than Eastern time. Educated those who cared about time zones.
- Tracked down production failures in X25 EDI interface used to notify customers of progress of shipments. Wrote program to salvage log and DB data to determine which customers to send “catch up” mail to.
- Used my notes to speed up mentoring and on-boarding of new backend developers.
- Generated shipping events in X25 EDI format for use in lower test environments to be able to test shipment notifications.
- Continuous enhancements, debugging, and fixing of many backend daemon services. Critical fixes.
- Extensive middleware, X12 EDI, and TCP/IP communication with other systems using XML, SOAP, RESTful APIs, Oracle Message Queue, IBM Websphere MQ, distributed computing and straight TCP/IP.

**Vonage Networks ; Holmdel, NJ ; May 2016 to Jul 2016 ;** via SmartLink ; Annapolis, MD  
Job Title: PHP Software Developer (consultant); Position: integrating new business acquisitions.  
Skills: PHP, perl-5, Linux, PhpStorm, MVC, VirtualBox, shell scripts, MySQL, git, google docs, Slack, Jira.

- Strengthened customer FTP portal passwords in difficult legacy perl program customers used to provide portal call records. Much exploration and discovery required due to lack of useful information.
- Reduced “swivel seat” operations by integrating new acquisitions into existing PHP web pages.
- Debugged PHP code and generated web pages using PhpStorm and Chrom Development tools.
- Reduced mentoring times for new hires using my notes that became “amazing documentation”.

**ISenpai ; Manassas, VA 100% remote ; Mar 2016 to May 2016 ;** via Kforce Federal Contracts  
Job Title: Perl Subject Expert (consultant); Position: short “surge” support for improving net security products.  
Skills: Python, perl, CentOS, MongoDB NoSQL, NIST.SP.800, bash, PowerShell, documentation, Gitlab, Jira.

- Heavy development burst of unclassified network based security project under much of NIST.SP.800.
- Recruited for Linux/perl skills though technologies actually used went far afield from those skills
- Bundled open source network tools in python driven modules to provide more unified and consistent security checks.
- Last week surprise included the creation of Linux and Windows installation bundles and documentation at end of project. Myself and one other were the only people volunteering to write the documentation.
- Was invited to come back for a second “surge” but had other commitments.

**IDT ; Brick, NJ ; Nov 2015 to 2016 Jan ;**

Job Title: Linux Engineer for package building and system provisioning software.  
Skills: Lubuntu Linux, Debian packaging, PHP, X window configurations, AWS.

- Small team developing new point of sale product targeting existing customers,
- Makefiles to compile code and build Debian packages for publishing on Amazon Web Server (AWS S3).
- Wrote package maintainer scripts.
- Wrote installation scripts to configure hardware and Linux software, including touch screens under X. Bash shell and php scripts.on Amazon Web Server (AWS S3).

**AT&T Labs ; Middletown, NJ ; Jun 2013 to Sep 2015 ;** via Insys Group, Rochelle Park, NJ

Job Title: C Linux Developer (consultant); Position: BE developer monitoring cell tower performance. DevOps.  
Skills: C, gcc toolchain, Linux, Solaris, HP-UX, Red Hat Enterprise, ksh/bash scripts, perl-5, distributed applications, read and transform data at terabyte network volumes, SQL, multi-processing, threads, regression tests.

- Performance improvements to applications and report generation, sometimes by 30%.
- Successful proof of concept that multi-threaded perl code could speed up report even more.
- Clean incoming dirty CSV files using perl-5 enough to successful insert into database.
- Improved install quality and speed by automating installation of applications for developers using shell scripts.
- Use of Oracle SQL for assorted tracking enhancements.
- Use of very large Daytona Database for very large cell tower call records for network monitoring and performance. This included writing queries in Daytona’s native Cymbal language as well as Daytona’s SQL front-end to Cymbal.
- Informal “contest” with coworker who had worked with, and was trained by, David Korn about the who knew more about the ins and outs of the ksh shell. He “won” more than I did, but we both learned a lot.
- Use scp, and especially sshfs (libfuse), to automate moving files between development systems. Carefully using sshd configurations to keep security higher.
- Rotated into DevOps during project reductions.
  - Configured and maintained systems.
  - Started training for tier-1 24x7 support of department’s internal applications, including those I had been coding for.
  - Extracted information for reports from largest database I have ever used driven by Daytona DB.
  - Improved automation of adding and removing users from clusters of systems.

**Verizon Wireless ; Warren, NJ ; Mar 2011 to Jun 2013 ;** via Datanomics. Bridgewater, NJ

Job Title: C Developer (consultant); Position: Point Of Sale backend C Developer

Skills: C, shell scripts, HP-UX, Oracle SQL, Pro\*C, VMS, VMS RDB, COBOL, perl-5, Restful APIs, EDI, VirtualBox.

- Helped migrate VMS backend C, COBOL, and DCL applications to replatform onto HP-UX UNIX server. Agile.
  - Automated repetitive work using perl tool to involving syntax, #include files, etc.
  - Reduced code changes by writing C library to perform some VMS actions on UNIX without changing calls.
- Slashed time for testers, developers, and others, to identify causes of stuck test orders using perl based web server reporting status of test orders and virtual inventory,
  - Nominated for employee of month by lead tester in response to time it saved his group.
- Intensive communications using MQ operations (MessageQ, MQ Series), TCP/IP, RESTful APIs, SOAP, XML.

**Numara Software ; Woodbridge, NJ ; Sep 2008 to March 2011 ;** via Consultis of Tampa, FL

Job Title: perl-5 Sales Support (consultant); Position: Professional Services FootPrints full stack developer

Skills: Windows, Linux, Solaris, FreeBSD, perl, SQL (Oracle, Postgres, MySQL, SQL Server, ...), HTML, LDAP, VMware, Virtual Box, JavaScript, shell scripting, make, Apache & ISS web servers, documentation.

- Grew regression test library using perl's Test::More and shell scripts.
- Proposed changes that were adopted into both the style guide and FootPrints installer.
- Wrote SOWs after estimating effort for customer customization requests, discovering requirements.
- Saved account by remote debugging via Webex severity-1 problem on remote customer system.

**Avaya ; Lincroft, NJ ; Jan 2008 to July 2008 ; 6-month ;** via Case Interactive of Farmingdale, NJ

Job Title: C Developer (consultant); Position: Migrate and replatform C and shell application on new servers

Skills: HP-UX, C, gdb, make, gcc toolchain, XML, SVC, shells, Linux, perl-5 LWP, DBI::Informix, Net::FTP, Module::Build, IBM MQ Series, Informix SQL, ISQL, team environment, project leadership.

- Replatformed legacy server code software to new servers. Automated GPS updates from vendor's server.
- Migrated legacy DB to new Informix DB server using CLI tools I wrote to extract, transform, and load data.

**Cheetamail ; Manhattan, NY ; May 2007 to Dec 2007 ;**

Job Title: Perl Developer; Position: Full stack developer for Internet SaaS Email Provider

Skills: Perl, DBI, Apache, TemplateToolkit, mod\_perl, shells, XML, and SQL, UTF-8, Internationalization I18N.

- Added features to new customer GUI for e-mail campaigns. Worked across several development teams using home-grown MVC class, mod\_perl debugging, Oracle SQL, templates, and JavaScript.
- Created documentation on system internals appreciated by developers and other advanced users.

**Vonage Networks ; Holmdel, NJ ; Aug 2006 to April 2007 RIF ;**

Job Title: Software Developer; Position: Full stack developer C, perl, JavaScript, TCP/IP networking, SNMP.

Skills: Perl: LWP, DBI; RH Enterprise Linux; Solaris; make; shells; package building; rrdtool; Source Version Control, CVS, svn Subversion, OpenNMS; C; SOAP; network MIBS, rdtol, documentation, requirement

- Became OID/MIB SME for team scanning VOIP network for new devices, adding to OpenNMS reports.
- Created perl web server cgi-bin to analyze SNMP scan logs to report on device trees.

**Lumeta Corp. ; Somerset, NJ ; Mar 2004 to Jul 2006;** via Key Data - March 2004 to Aug 2005

Job Title: Perl Software Developer; Position: IPSonar servers, automated builds, FreeBSD kernel & installer.

Skills: perl (LWP, mod\_perl, CGI), refactor, SSL/TLS, C, gcc toolchain, security certificates, heavy shell scripting.

- Split monolithic server into report and sensor servers exchanging serialized objects across security zones.
- Improved field upgrades to the point customers could often upgrade without Lumeta personnel present.
- Reduced Certificate creation time and improved tracking on internal Certificate Authority system.

## EDUCATION:

California State Fullerton: major Computer Science. Fullerton College: major Electrical Engineering