

Lynn David Newton

Computing technologist with broad expertise in: system testing of operating system and application software; documentation development; Web application programming; Unix, GNU/Linux; software quality assurance; and business processes. A Unix engineer since 1984. Collaborating editor of scientific, forensic, and information assurance documentation. Creator of test and test management software, and Web sites. Author of educational curricula and technical documentation, also non-technical books. Superior verbal communication and presentation skills, with experience in teaching and mentoring.

Technical Skills

Operating Systems Numerous variants of Unix, including GNU/Linux, Mac OS X, AIX, FreeBSD, System V Release 2–4, Solaris, BSD/OS; also several older operating systems

Programming and Markup Languages Perl, Unix/Linux shells (`bash`, `ksh`, and `sh`), \LaTeX / \TeX , HTML/XHTML, CSS, PHP, JavaScript, Python, C, Emacs Lisp, `troff/nroff/xroff`, Scheme, Forth

Software/Databases/Protocols Unix command set, many Google Products, MySQL, Version Control (several methods), VMware, XEmacs/GNU Emacs, Gimp, OpenOffice, FrameMaker, PostgreSQL, Plone CMS

Miscellaneous X11, Apache, CGI, NFS, Bugzilla, Firefox, Chrome, Safari, Internet Explorer, some German language

Work Experience

Interhack Corporation Senior Analyst 2007–2009

- Documentation Editor.
- Acted as quality assurance lead on software projects, wrote test plans, test cases, assembled test teams, directed testing, reported defects, created test reports for clients.
- Maintained corporate Web site, assisted with migration to Plone CMS, served as release manager.
- Defined and developed corporate documentation standards and processes.
- Collaborated with scientists and analysts to create peer-reviewed scientific papers, journal articles, and forensic computing and information assurance reports for clients.

Gen Con Web Application Developer 2006–2007

- Developed company's convention management software using Perl, MySQL, and Apache on Linux servers.

Montavista Software Software QA Engineer 2005–2006

- Programmed Linux kernel test software for embedded telecommunications hardware.
- Tested Carrier Grade Edition 4.0, also asynchronous Linux Support Packages for telecommunications boards.

Registration Resources Web Application Developer 2002–2004

- Lead developer of RegPro, the company's principal software product, a client-modifiable system for managing conventions, events, training, and membership registrations.
- Designed RegPro extension modules, including Hotel, an accommodations reservations package for convention level events.

University of Advancing Technology Senior Instructor 2002

- Taught beginning and advanced Unix and Linux.

Motorola Computer Group Staff Software Engineer 1987–2001

- Created TCM (Test Case Matrix) application to standardize test planning, tracking and reporting, resulting in time savings of 75% over previous method.
- Created ACTS (Automated Controller for Test Suites), a domain-specific programming language, also a Programmer's Guide. ACTS enabled unattended running of tests in 48 hours that would have taken months by hand, resulting in productive detection of product defects.
- Wrote a paper about ACTS that was selected for oral presentation at a Motorola Technical Ladder Conference, giving the application company-wide exposure as an effective testing tool.
- Built STLib (System Test Library) of test and tools software, process and project documents, and work objects, which played a primary role in our department becoming second in the company to earn SEI level two accreditation.
- Led AIX compliance and POSIX testing on PowerPC platform products, and served as liaison between MCG and IBM compliance teams, resulting in MCG PowerPC system products earning AIX and POSIX accreditation.
- Completed eight-week Motorola SRD Software Engineering Training Program, resulting in certification as a Motorola Software Engineer.

Four Phase Systems Senior Software/QA Engineer 1983–1987

- Tested system products prior to release, resulting in many fewer product defects being delivered to customers.
- Beta tested third party applications and documentation, resulting in their being brought up to marketing standards.

Self Employed Consultant 1978–Present

- Built PostgreSQL database, participated in forensic data analysis for Interhack Corporation.
- Wrote Unix and Linux educational curricula for Cisco Networking Academy Program, to be used in CNAP's 10,000 academies world-wide.
- Web developer. (Reference sites available on request.)
- Music engraver, music services provider.

Career Development

- Presenting Data and Information (Edward Tufte)
- Embedded System Development Using MontaVista Linux
- Perl, Advanced Perl
- C Programming (several courses)
- AIX System Administration and Use
- Software Testing (several courses)
- Configuration Management Version Control (CMVC)
- Capability Maturity Model (SEI)
- Motorola SRD Software Engineer
- LynxOS RTOS
- FrameMaker
- Chorus RTOS API
- Scheme Programming
- CompactPCI High Availability Architecture and Hot Swap Technology
- PowerPC Hardware System Troubleshooting

Education

- One year Master of Music program in music composition, University of Illinois, Urbana, Illinois
- Bachelor of Music, University of Illinois, Urbana, Illinois
- Bears Prize in Music, Columbia University
- Several fellowships, scholarships, and awards

Miscellaneous

- Member of \TeX Users Group (TUG)
- Long-time runner and organizer of marathons, ultramarathons, and multi-day races
- Lifetime musician, member of American Society of Composers, Authors, and Publishers (ASCAP)