

Paul Johnson

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- Technical leadership, management, QA.
- Systems analysis, design and programming.
- Design and implementation of commercial testing tools.
- Native English speaker, with some German and French.

Interests

- The production of, and the processes which lead to high quality software.
- Fostering a culture which emphasises quality throughout the entire software process.
- I contribute to open source projects, including Perl, Vim and Zsh.
- I enjoy leadership, building proficient and motivated teams and helping others learn.

Perl

- I have been an active member of the Perl community for many years.
- Contributed numerous patches to the perl core, core modules and CPAN modules, most recently a core patch to reduce memory usage by up to 2.5%.
- Various modules on CPAN.
- Presented a paper at the 2002 European Perl Conference and two papers at the 2003 conference.

Devel::Cover

- I am the author of Devel::Cover, a code coverage module for Perl.
- I maintain and am constantly improving the module and integrating patches I get sent.
- This involves ensuring the accuracy of the results, ease of use, provision of features and optimisation of the code to reduce the coverage overhead as far as possible.
- The module is currently being used for CPANCover and as a part of the Phalanx QA project for Perl.
- Other users I know of include UBS, Morgan Stanley, SpamAssassin and Bricolage.

Experience

- I have a broad range of experience and a flexible attitude gained from founding and working in a startup company for eight years and also from working in large companies.
- Understanding of software development processes and ability to manage teams to ensure the production of high quality software delivered on schedule and to a budget.
- Equally comfortable managing a team, working as a team member or working on individual projects.
- Balancing of business requirements, user expectations and technical best practices.
- Devised, driven or managed the QA process in a number of companies.
- Very familiar with the technical aspects of software testing and QA having written commercial code coverage tools, test harnesses and the Perl coverage module Devel::Cover.
- Experienced software designer and developer.
- Comfortable working with both technical and business teams. Used to making presentations to both groups.

1992 - 2000 : TransEDA Ltd

Provider of code coverage tools for hardware design languages

- I was a founder of this company, which had a successful IPO on the London Stock Exchange. TransEDA was the first company to bring code coverage analysis to the EDA market.
- Responsible for all aspects of product development, including management, planning, specification, design, implementation, testing, documentation and maintenance.

- Worked closely with customers, field engineers and support staff, managed sub-contractors and conducted recruitment interviews.
- Researched new technologies and techniques and investigated whether they would be beneficial to the business. Determined how best they should be deployed and devised strategies for their use.
- Designed and implemented large sub-systems of various EDA products, including:
 - Code coverage tools
 - A VHDL front end to synthesis tools
 - Synthesis algorithms
 - A technology mapper
- These were all OO designs written in C++ and Perl on Unix.
- Created QA strategy and infrastructure and built or selected the tools necessary to ensure high quality products. Provided training and support in this area as required.
- Designed, implemented, and maintained the build, test and licence generation systems. These were written entirely in Perl and worked across multiple operating systems.
- Responsible for the introduction of Perl into the company, first for internal programs and then for products, for which it became the major development language. As this happened I conducted many internal training sessions for the company engineers.
- Designed and implemented GUIs in C++/X/Motif and Perl/Tk.
- Ported software products between various versions of Unix, including Solaris, SunOS, HP/UX, AIX, Ultrix and Linux, and to other Operating Systems including VMS, DOS and Windows.
- Wrote user manuals for early products. Proof read later manuals and promotional material.

May 2000 - June 2000 : contracted to Ordnance Survey

Britain's national mapping agency

- Debugged and extended the suite of Perl programs that was the backend to the National GPS Network.
- Put in place a testing system. Analysed and reported upon the entire project.

July 2000 - August 2001 : Olsen & Associates

Research into and supply of high frequency financial data

- Formalised the QA process, updated and extended the tests and standardised and documented the entire test system.
- Worked closely with the quality engineers to ensure the integrity of the data and the correctness of the software.
- Maintained, supported, enhanced and documented the build system. Designed, implemented, maintained and extended Perl and C++ libraries and wrote interfaces between them.
- Upgraded the infrastructure of Perl, its modules, gcc, apache, mod_perl, SWIG and other related software, modified internal software as appropriate and provided support to users during the change.

October 2001 - : UBS

Swiss bank

- Responsibility for integration and production testing of a large project unifying credit systems and involving numerous internal groups and external companies.
- My work involves:
 - Ensuring that software is fit to go into production and providing ultimate sign off.
 - Coordinating the activities of the QA teams in the various groups. Providing support and advice as required.
 - Making process improvement recommendations to the development and production teams and assisting in their implementation.
 - Setting up automated testing suites using Perl and commercial packages.
 - Introducing monitoring and reporting tools for the various applications under test.
 - Ensuring that installation processes are complete and accurate.

- The introduction of automated testing, monitoring and reporting tools, coupled with process improvements, has led to an increase in the availability of the testing systems from an estimated 75% to over 95%.
- The working language is German, and I am able to effectively perform my work although I cannot claim to be fluent or even particularly proficient in German.

Other Experience

- A web site (<http://www.compactcard.com/quote.html>) providing on-line quotes for CD replication and allowing all of the company administration to be performed via a web interface. I designed and created the site using Perl, apache and mod_perl on the server, and dynamically generated Javascript and DHTML on the client. (The site has changed somewhat from the original.)
- A program to help improve the reading and spelling skills of dyslexic children. It is written in Perl/Tk and uses sonic and visual clues to present phrases to children, which they then type in. It runs on Linux and Windows and is currently being used in a very successful teaching programme.

1990 - 1992 : Roke Manor Research

Research into CAD tools for VLSI design

- Responsible for the development and implementation of logic synthesis algorithms, and for the development and optimisation of low-level modules to facilitate this.

Qualifications

- **M.Eng.** (Software Engineering) Class II(1) Hons. Imperial College of Science and Technology, London.
- **3 A levels** (Computer Science, Mathematics and Physics), and **11 O levels** including English Language.

Technical

- OO design and programming in Perl, C++ and other languages, the use of debuggers, memory checkers, profilers, code management tools, shells, Unix utilities, build systems and other development tools.
- Proficient in many dialects of Unix, and familiar with a number of other Operating Systems.
- CGI, apache, mod_perl, Javascript, DHTML, CSS and other web technologies.
- Always keen to learn new technologies and improve my skills.