

Seán P. Quinlan
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SUMMARY

Lead developer and group manager with over twelve years of Perl, Linux & Apache development experience, primarily in designing web interfaces for data management & presentation. Eight years LAMP development experience, including designing and leading large scale, multi-year projects. Extensive experience in project, personnel and resource management. Collaborative team builder with strong leadership and communication skills.

Languages

Perl (DBI, mod_perl), SQL, (X)HTML, CSS, JavaScript/AJAX, Shell-scripting
Familiar with C/C++, PHP, Ruby

Example tools & libraries

Informix (SPL), Apache, Perforce, ServerStudio, JIRA, Confluence, SSH, GPG, Bugzilla, Selenium, MySQL, XML, PDL, RSS, XUL

PROFESSIONAL EXPERIENCE

Software Development Group Manager
Cambridge Interactive Development Corporation, June 2009 - Present

- Lead a team of 4 developers, overseeing their work, taking responsibility for project quality and timeliness, striving to ensure our team delivers high quality applications and features.
 - Responsible for the long-term stability of the companies Affiliate Management system, including software architecture, database schema and supporting hardware and processes.
 - Act as technical lead on projects, frequently coordinating the efforts of additional development resources beyond my team who were assigned to contribute to a project.
 - Coordinate with other internal departments including Quality Assurance, Release Engineering, Marketing and Affiliate Management.
 - Continue as a primary contributor in organizing the companies *Technology Projects* pipeline, the ongoing effort to support and organize the technology and infrastructure improvements identified by the *Engineering Infrastructure Task Force*, as well as those identified since.
 - Technical lead on the implementation of the companies *Perl Runtime Environment*, which decouples the companies Perl based tools and services from the OS version of Perl. This was critical to allow IT to migrate to new Linux systems with negligible risk to our older software, as well as supporting a move to a package based release process that significantly reduced release time.
 - Technical lead on the migration of Development, QA and Staging resources to VMWare with the goal of automated deployment.
 - Coach, mentor and lead personnel within a technical team environment, including providing cross-department Perl training, presentations on using various tools supporting our SDLC and one-on-one reviews.
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Sr. Software Engineer

Cambridge Interactive Development Corporation, March 2007 - June 2009

As part of the server-side development team I have worked on nearly every portion of the companies software, both internal management and customer facing.

- Worked as a primary developer on the companies two highest profile, externally facing projects to be released during this period.
- Involved in spec review, project timeline estimation, documentation and release management for nearly every project on which I was involved.
- Assigned Development liaison to the QA department.
- Introduced Selenium IDE to company, provided training for QA and Development on its use and participated in planning how tests are integrated into QA process and are stored in revision control.
- Involved in pilot project to introduce Selenium RC to QA pipeline, allowing Selenium tests to be additionally used in fully automated testing across all supported browser/OS versions.
- Provide internal support and training on use of jQuery and Prototype JavaScript libraries.
- Worked jointly with the head of Release Engineering documenting the companies SDLC, including recommending the inclusion of certain best practices such as code review, earlier QA involvement, etc as part of the SDLC. These recommendations were all later adopted.
- Helped form CIDC's *Engineering Infrastructure Task Force*, served as Server Side Developments representative and documented EITF recommendations for improvements to infrastructure and SDLC.
- Won numerous quarterly awards and contributor appreciation bonuses

System Support 3

Bioinformatics Program, BMERC, Boston University Jan. 2004 - March 2007

Provide systems support and development for the [Bioinformatics Program](#). Help the Center's graduate students and postdoctoral fellows develop new tools to meet their own research goals, including providing advice on good software development practices.

- Developed new methods for prediction and classification of WD repeat containing sequences.
 - Assisted in developing specifications and bid review on 200+ CPU purchase.
 - Improved and extended database schema's, including incorporation of extended WD repeat library and preliminary genome assemblies.
 - Streamlined update procedures for new genomes.
 - Provide genomic databases and tools for use on the BioWulf cluster.
 - Developing a new student management system to meet the specific needs of the program.
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Bioinformatics Specialist

Massachusetts General Hospital, Department of Molecular Biology Sep. 2001 - Jan. 2004

Project leader for development of mission critical applications for the [MGH's DNA Core](#), principally a [Laboratory Information Management System](#) (LIMS).

- Spearheaded adoption of software development best practices such as version control and setting up a dedicated QA and documentation team.
 - Coordinated representative users and core managers to develop requirement specifications, and guided development to meet those requirements and QA to validate project releases.
 - Integrated data management tools for four subgroups within the DNA Core: Synthesis, Sequencing, Bio-Automation and Microarray.
 - Developed tools for incorporating a wide range of high-throughput equipment for such tasks as sequencing and oligonucleotide synthesis and support for product QC and process control.
 - Provided a web front end for process management with secure (SSL) access from any computer on a permitted network using any modern browser. System incorporates group and user access controls to resources and data.
 - Created a client interface for placing orders for oligo synthesis and sequencing including tools for tracking the progress of an order.
 - Provided order and account reports suitable for import into the existing billing procedures, greatly improving the level of automation in tracking customer orders and generating invoices.
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Director of Informatics

Modular Genetics Inc. July 2001 - January 2003

Supervised specification, acquisition and setup of new biotech companies IT resources.

- Designed network layout and security measures to specifications required by contracts with pharmaceutical companies.
 - Guided development of new tools required to meet MGI's core requirements.
 - Assisted in developing new techniques to build on MGI's patents and IP to improve financial viability and open new potential markets.
 - Worked with lab managers and CTO to develop procedures for managing project data, including log files from, and protocols for using, high-throughput equipment.
 - Designed initial specifications for MGI's Information Management System
 - Developed interim database for managing and storing MGI's crucial Bioinformatics analysis.
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Consulting and Training Services

Experience consulting on projects ranging from large-scale Bioinformatics projects to small community web sites. Facilitate multiple day, hands-on workshops providing professional Perl development training. Classes range from an introduction to Perl to advanced Perl programming.

- Developed a user friendly front end for a bio-tech companies internal Bioinformatics tools, meeting a funding benchmark with a major international company licensing them. This project was brought from behind schedule and largely undocumented to being delivered early for final review.
 - Designed a MySQL database to store 10's of millions of records for research lab, with links to internally stored publicly available biological data. Participated in general lab set up and designing the databases and tools needed to meet long-term needs. This work has been directly used in a publication and is a resource used behind additional publications.
 - Developed custom training curriculum including workshop examples designed to the interests and needs of the clients field(s).
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Patents and publications

- International Patent application WO/2004/064482 - "[Alien Sequences](#)"
 - Technical reviewer for "[Mastering Perl for Bioinformatics](#)"
 - "[PACdb: PolyA Cleavage Site and 3'-UTR Database](#)" - [Bioinformatics \(PACdb website\)](#)
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Other experience

- Active participant and organizer in [Boston Perl Mongers](#) since 1999, organized the monthly technical meetings from fall 2003 to spring 2005, and host the groups website.
- Developed complex gaming tools for use by players of a browser-based multi-player online game with 40,000+ regular players at its peak. Work includes a FireFox extension which was announced with '*... has delivered the single best metagaming tool yet to the UD world*' by a prominent player.
- IT Committee member and Youth leader, [Melrose Unitarian Universalist Church](#).
- Master of Fidelity Lodge A.F. & A.M.

References and letters of recommendation available upon request.