

DANIEL LO

SENIOR SOFTWARE ENGINEER

<http://www.danlo.com/>

Summary

I have 15 years of experience working in the Internet field, both in startups (PictureTrail Inc. 2000 – 2007, Slideshare 2009 - 2011) and as part of larger companies (RottenTomatoes.com / IGN) in the LAMP stack. I have strong secondary skills in MySQL Database Administration. I am also a firm believer in business process, source control management, unit testing, documentation, and architecture. I have a Bachelor of Science in Computer Science.

Technical Skills

- Ruby (RoR), Perl, PHP (Pecl Libraries; APC, PHPUnit, Xdebug), FastCGI, CGI, XML, HTML, Javascript (node.js)
- MySQL, HAProxy, TokyoTyrant, Varnish, Memcache, Apache, Subversion, Akamai / ESI
- Windows, MacOS X, Linux (Ubuntu/CentOS), FreeBSD, Shell programming

Employment

SENIOR SOFTWARE ENGINEER/DATABASE ADMINISTRATOR

AUG. 2009 – MAR. 2011

Slideshare www.slideshare.net

- Software Development
 - Work with remote teams out of US timezones
 - Evaluated several TDD strategies and started unit testing & CI server
 - Overhauling transactional emails to maximize viral loops with A|B testing
 - Moved email handling from local systems to Sendgrid.com
 - Reduced page generation time for the slide deck page (main page of the site) by one-half via code optimizations
 - Converted hadoop processes to use local machines saving money and providing better control and visibility
 - Updated code to help split load among multiple database master and slaves
 - Replaced older code with new code following best practices, improving performance and reliability
 - Helped train intern and other engineers
 - Misc. performance optimizations
- Database Administration
 - Planned out scaling of databases and upgrades
 - Moved database setup from single master, several masters with slaves
 - Identified and provided solutions for replication issues
 - Performance monitoring, indexes
 - Query optimization via (faked) materialized views
- Ops
 - Documented network and data routes
 - Worked with HAProxy, Varnish, identifying caching issues and working on solutions
 - Worked on resolving caching issues in Varnish, increasing hit rate and reducing load on existing servers
 - Helped solve problems that bridge ops and development roles

DATABASE ADMINISTRATOR / PROGRAMMER

FEB. 2008 – AUG. 2009

RottenTomatoes.com / IGN rottentomatoes.com

- Software Development
 - Created and managed best practices
 - Unit testing
 - Documented practices, code standards and, code reviews
 - Migrated code base into Subversion
 - Created new model layer to simplify database access
 - Implemented Akamai Edge Side Includes (ESI)
 - Greatly improved response times for selected pages

- Enabled legacy code to easily utilize ESI functionality
 - Wrote Object Oriented Programming code for new system functionality
 - Exported data for clients using XML validated with DTD
 - Maintained legacy code
- Database Administration
 - Created and documented new database schema for new projects
 - Documented existing databases schema diagrams and tables
 - Helped engineering team with query authoring
 - Optimized SQL queries which improved page response time and system uptime
- System Development
 - Created deployment process, using subversion
 - Reduced down time
 - Solved SQL query performance issues
 - Wrote libraries to measure page generation performance and identify errors
 - Performance testing to identify hardware bottlenecks
 - Diagnostics
 - Developed Memcache and MySQL monitoring tools
 - Provided tools to test configuration, network connections, and authorization
 - Normalized production and development systems
 - Worked with TechOps to standardized PHP, Pecl Libraries, and MySQL versions across all environments
 - Supervised front end server upgrades; ensured configurations / code systems compatibility

PRINCIPLE ENGINEER / DATABASE ADMINISTRATOR

2000 – 2007

PictureTrail Inc. picturetrail.com

- Planned and executed system expansion through a high growth stages
- Web programming in Perl and PHP
 - Sole programmer (2000 - 2005)
 - Designed and developed site monitoring tools, gathering statistics and alerting staff
 - Wrote custom applications for back-end activities for user provided content, uploading, storage, and backups
- DBA
 - MySQL from 3.x, 4.x, to 5.0.x
 - Handled backups/recovery, maintenance, repair, replication, and MySQL upgrades
 - Schema design and documentation
- On-call with 24/7 availability for over 7 years
- Hired and trained staff

Community Service

VOLUNTEER

2007 – 2008

KindaPerl6 dev.pugscode.org/browser/v6/v6-KindaPerl6

- KindaPerl6 is an open source implementation of Perl6
- Provided code maintenance, documentation, clean up, programming in Perl 5

VOLUNTEER

1994 – 2002

Friends of the Urban Forest fuf.net

- Supervised on-site tree planting
- Promoted organization at conventions

Education

BACHELOR OF SCIENCE IN COMPUTER SCIENCE

San Francisco State University