

SUMMARY

A software engineer with **nine** years of development experience; a passionate, resourceful problem-solver.

PROGRAMMING SKILLS

- **Extensive Experience** in
Front End: AJAX, JavaScript, JQuery, CSS, Flex, UI Automation.
Back End: C/C++ (COM, ATL), Java, Oracle Database, SQL, PL/SQL. Test Driven Development.
- **Environment:** Eclipse, Visual Studio, Linux, Windows, Mac, VMs.
- **Working Knowledge** in L^AT_EX, Apache, Python, Perl, PHP, MySQL, RESTful architecture.

EXPERIENCE

Principal Member of Technical Staff — Oracle USA, Redwood Shores, CA, 6/2004 - *Present*

Technical Lead in Oracle Support portal, used by millions of Oracle DBAs worldwide. One of the projects was highlighted in **Oracle Open World 2009, CEO Larry Ellison's keynote**.

- **Modularized and Refactored** 300K front-end code into 22 separate, layered libraries.
- **Re-architected** the front-end into dynamically loadable modules. Reduced initial payload by 40%.
- **Improved** developer productivity; significantly reduced the client-side compilation time from 3 minutes down to 30 seconds using module techniques; reduced the server-side compilation + deployment + test time from 5+ minutes down to seconds using JUnit.
- **Implemented** multi-threaded back-end web services, caching, and proxy to external web services.
- **Promoted** best practices for writing testable code. Improved code coverage from nothing to 60%.
- The **'Go to guy'** for Flex, JavaScript, and all other framework related questions.

Technical Lead in Monitoring Tools Development. Availability and performance monitoring across multiple geographical locations; used by internal and external customers; one of the larger contracts was in 7 digits. Acting as the architect, designed and developed the following key subsystems:

- A browser-plugin (C++ and JavaScript) that **records, analyzes, and replays** web transactions.
- The browser-plugin part of a **tracing and diagnostic tool**, which shows the break down of time taken for HTTP requests, Java method calls, and SQLs in an interactive user session.
- Many heuristic techniques that improve the recording accuracy: HTTP traffic and DOM correlation; dynamic variable detection; dynamic Regular Expression generation and substitution.
- Clever event listening techniques that make the recording overhead negligible.
- Parts of a URL fetching tool in C and Java, the key to monitoring availability and performance from multiple geographical locations, without using a real browser.
- Over 30 complex JSP pages for services, web transaction, metrics and thresholds configuration.
- Business model layer, persistence layer using Java, JDBC, SQL and PL/SQL. Tuned the performance of complex back-end SQL queries.

Associate —

Goldman Sachs Inc, New York, NY, *6/2001 - 8/2003*

- **Consistently ranked** in the **top quartile** in the 360° Annual Review System.
- **Designed** reusable UI components for an in-house AJAX style web application framework.
- **Significantly improved** the performance of the UI framework and UI components.
- **Developed** a distributed n-tier document search and retrieval system.
- **Developed** Excel-based financial models, risk analysis models, and staffing management solutions.
- **Maintained** infrastructure scripts and database schema that manage thousand of desktop machines and servers around the globe.
- The ‘**Go to guy**’ for JavaScript, CSS, and Excel questions.

Intern Research Engineer —

Canon Information Systems Research, Australia, *12/1998 - 2/2000*

- **Researched** two-dimensional image demodulation algorithms, and made a considerable intellectual contribution to the algorithm using spatial and Fourier based methods and MATLAB.
- **Developed** parts of a successful, robust, and reliable scientific image analysis application using C/C++.

EDUCATION

M.S., Computer Science, Full Tuition Scholarship, GPA 3.9 — Cornell University, Ithaca, NY, *2004*

- **Thesis:** Quark - A next-generation data management system that searches heterogeneous data source using XQuery. Part of a team that built a functional, end-to-end, **open source** XQuery engine in C++.
- Database Implementation, Graphics, Distributed Systems, Networks, Scientific Computing

B.S., Computer Engineering, GPA 3.8 - 3.9 — University of New South Wales, Australia, *2000*

- **First Class Honors, Rank:** *2nd*/111 students, Thesis Scholarship, Canon Academic Excellence Awards
- **Thesis:** A video annotation and search tool that allows users to annotate (tag) semantic information (keywords) on video clips, and search video clips using the keywords.
- **Teaching Assistant:** Functional Programming, Algorithms
- **Research Assistant:** Developed the back-end of an open source search engine **CVSSearch** using data mining and advanced string matching techniques.
- **Published** in IEEE International Conference on Software Maintenance (ICSM 2001), Pages 364 - 373.
- Algorithms, Operating System, OO Design, Database, Computer Architecture, Neural Networks, Image Processing, etc

OTHER AWARDS

- **Member** of Australian Mathematics Olympiad National Team Training Squad *1995 & 1996*
- **Bronze Medallist** in Asian Pacific Mathematics Olympiad *1996*
- **Gold Medallist** in Australian Mathematics Olympiad *1995 & 1996*
- **Medallist** in Australian Westpac Mathematics Competition *1991 & 1995*