

## Education:

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**Stanford University** - Stanford, CA

Degree: M.S. in Computer Science

**Graduation Date:** Dec 2006

**Michigan State University** - East Lansing, MI

Degree: B.S. in Computer Science

**Graduation Date:** May 2004

**Additional Major:** Japanese

**GPA:** 3.85

## Experiences:

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**IMS Serviceability Tools Development**

**Jan 2005 – Present**

**IBM, Silicon Valley Lab, San Jose, California**

- Co-inventor of an innovative IMS function potentially applicable to any other IBM products and also involved in other IMS tools development. Responsibilities include code design, authoring of the functional spec, code development, and unit testing.
- Create fixes and extend current functions through the APAR process. Communicate target dates changes appropriately and ensure timely APAR closure to avoid expired target dates.
- Co-develop and redesign intranet web sites used and accessed by IBM technical personals.
- Demonstrates leadership, teamwork, and communication skills working with other departments and tasks spanning multiple IMS components.
- Achieve first patent application

**System Administrator**

**Oct 2004 – Present**

**Lyons Ltd., Palo Alto, California**

- Maintain and manage the art gallery's computers/server and business network
- On call for any emergency or to answer/debug any technical problems

**Student Web Developer, Web Systems Development**

**Oct 2004 – Jan 2005**

**Stanford University, Stanford, California**

- Enhance and support all websites under Stanford School of Medicine

**i5/OS Development Team**

**May 2004 – Aug 2004**

**IBM, Rochester, Minnesota**

- Responsibilities include the design and execution of test cases to exercise the security checking and auditing features of the operating system in the compliance for US government certification.
- Developed new internal system interfaces written in PL/X and C which will allow other components of the i5/OS operating system to return information about objects stored in libraries.

**Graduate Research Program (SUPERB 2002)**

**Jun 2002 – Aug 2002**

**University of California, Berkeley**

- Worked independently to complete research on the automation of geography-based redirection including expansion of routers database to Asia, data collection, analysis and recommendations.
- Supported development of a traceroute-based IP-location mapping tool, GeoTrack (C/C++).
- Enhancement of research skills through faculty interaction, writing and presentation.

**System Administrator**

**May 2001 – May 2004**

**Michigan State University, Computer Science Department**

- Maintenance of UNIX servers and WinNT servers in a hybrid environment.
- Utilize HTML/PHP and Dreamweaver to consistently improve and maintain department webpage.
- Assist students with various computer related problems by listening and appropriately responding using troubleshooting skills and offering proper instructions toward resolution.

**Web Developer**

**Jun 2003 – Aug 2003**

**University of California, Berkeley, Math Department**

- Increased organization and efficiency by re-modeling the user interface of the Genome browser webpage using HTML, Javascript embedded in Python.
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## Skills:

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**Programming Languages:** C/C++, OpenGL, Java, PLMI, PL/X, CL, JCL, REXX, Perl, Assembly

**Database:** MySQL, Oracle, DB2, PL/SQL, IMS

**Web Development:** PHP, ASP, XML, HTML, JavaScript, CSS, AJAX

**Software:** Macromedia MX, Photoshop, Excel (e.g. Monte Carlo Simulation, Macro's/VBA), Eclipse, Visio

**Languages:** Fluent in Chinese (Mandarin and Cantonese), Japanese

**Others:** Multi-tasking and time management skills from simultaneous involvement in multiple student groups, athletic team, course work, along with a part-time job; Inter-personal communication skill; Flexible & adaptive.

## Projects:

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### DaimlerChrysler Electric Power Steering Risk Analysis

- DC plans to substitute traditional hydraulic power steering system with electric power steering in their upcoming models. Project goal is to examine the possible liabilities and benefits of EPS.
- First part of project is performing Probabilistic Risk Analysis (PRA) on the engineering system by identifying the subsystems, the failure modes, and accessing failure probabilities.
- Second part is a creative process of constructing an economic model of costs and benefits that includes identifying cost and benefits categories, formulating the relationships of categories, and accessing and computing the final economic impact.

### Topic Specific Search

- Objective is to provide user with search results containing different topics regarding a specific query
- Parses Google search results and resolves different topics using clustering algorithms based on results' contents

### Nachos Operating System (An experimental Operating System in C++)

- Implemented OS features in Nachos, Multithreads, Synchronization primitives (locks/semaphores), System calls (fork, exec, join, etc.), virtual memory, demand paging, filesystem, asynchronous I/O

### Real-Time Distributed Voice over Internet Protocol (VoIP)

- Requires teleconferencing with our client to determine the requirements and the design of the system
- Using Java and Java RMI, develop an application that permits oral communication with text translation based on "audio persistence" concept. Development includes socket programming, using JDBC driver to communicate with MySQL database, GUI, and interfacing with Microsoft's Speech Engine using JSAPI.

### Gnutella with Cache – a scalable Peer-to-Peer network

- Using the Limewire version of the Gnutella protocol (Java-based), with understanding of the documentation, we modified the application to implement the caching mechanism, collected data for analysis of feasibility and performance, and presented the result.

## School/Community Activities:

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### President of ACM/UPE, 2002 – 2003; ACM Vice President, 2001 – 2002

- Simultaneously managed the presidency for two major computer science associations; directed meetings, coordinated activities and effectively supported organization constituency.

### MSU Varsity Fencing Team (USFA D2001 foilist, E2003 epeeist), 2000 – Present

- Provide instruction to various skill levels and actively participate in collegiate competitions
- 2<sup>nd</sup> place MSU foil squad at 2004 Midwest Championship Tournament

## Honors/Special Recognitions:

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Distinguished Freshman Scholarship (Full Tuition)

MCH Michigan Merit Award

Wal-Mart Competitive Scholarship

Spartan Scholarship

Federal Pell Grant

Honors College Member

High School Valedictorian – Valedictory Scholarship

Dean's List – 8 semesters