

EDUCATION

University of Southern California, Los Angeles, CA

Master of Science, Computer Science

Relevant Coursework:

Analysis of Algorithms, Database Management Systems, Computer Networks, Web Technology, Robotics, Advance Mobile Devices and Game Consoles, Computer Communication

GPA: 3.95

May 2010

University of Rajasthan, India

Bachelor of Engineering, Information Technology

July 2007

TECHNICAL SKILLS

Certification	:	Sun Certified Programmer for the Java Platform, Standard Edition 6
Programming languages	:	Java, C++, C, Objective C, JavaScript
Web Technologies	:	AJAX, JSP, Servlets, PERL, PHP, HTML, CSS
XML Technologies	:	XHTML, XPath, XQuery, XSLT, DTD, XSD, RSS, REST
Google APIs	:	Google Gears, AxsJAX, Google Maps
Java APIs	:	J2SE, JDBC, JDOM, JAXP
DBMS	:	MySQL Server 5.0, ORACLE 10g, MS-Access
Network Programming	:	Socket Programming in C/C++ on UNIX
OS / Server	:	Linux (Red Hat), Windows, MAC OS X, Apache, Tomcat
IDE / Softwares	:	NetBeans, Xcode, Wireshark, Adobe LiveCycle Designer
CMS	:	Drupal 6.0

WORK EXPERIENCE

eContek Software and Technology Services *Software Engineering Intern* Summer '09- Present

- Reprogrammed and improvised legacy FORTRAN application into a web app using Java
- Monitored Apache web server and audited log files for identifying problems and suggested possible solutions

Management Information System - FMS, USC *Student Web Developer* Spring 2009

- Created interactive PDFs using Adobe LiveCycle Designer that validates the user input, store it in database and display the data to assigned manager for further processing
- Provided web development assistance for the FMS website

IBM India Pvt. Ltd., Bangalore, India *Associate System Engineer* Summer 2008

- Participated in IBM's new employee orientation and training program
- Reviewed various technologies and processes used in software development

RELATED EXPERIENCE

Department of Computer Science, USC	Grader	
• Designed a web interface using PHP and XML for maintaining and viewing grade sheets of students		
• Grader for Web Technologies (CS-571) under Prof. Ellis Horowitz		Fall 2009
• Grader for Database Management System (CS-585) under Prof. Shahriar Shamsian		Spring 2009

SS12 - Code for a cause *Programmer* Fall 2008

- SS12 is a team software development challenge that is focused on creating software for the disabled community
- Modified existing Google maps to make it accessible even for people with visual impairment
- Used Google AxsJAX API, Firevox and GreaseMonkey addons of Mozilla Firefox browser to provide accessibility

PROJECTS

- Google maps and Flickr mesh up** (Google Maps API, AJAX, Servlets) *Spring 2009*
- Developed a web application that takes any location as input from user and displays related pictures uploaded on Flickr through Google Maps using markers
 - Programmed a Servlet to perform reverse geocoding on user input, fetch data from Flickr using web service and return a JSON which is then processed using Google Maps API at client side
- Online/Offline feed reader** (Google Gears, AJAX, JDOM, Servlets) *Spring 2008*
- Developed a feed reader that allows a user to manage feeds (both ATOM and RSS 2.0), read the contents of feeds and categorize them
 - Built a Servlet that parses the XML Document (RSS/ATOM feeds) using java's JDOM API and returns a JSON string
- FMS work order management system** (PHP, MySQL) *Summer 2009*
- Developed a web application that accepts the work order submitted from a pdf file
 - Provided a web interface that allows for tracking and assignment of work orders within the users of the same group
- Mini ERP** (AJAX, DHTML, JSP, JDBC, MySQL Server 5.0) *Spring 2007*
- Led a team of 5 members to integrate all data and processes of the business, including planning, sales, manufacturing and marketing into a unified system
 - Programmed the front-end of the system using HTML, JavaScript and CSS
- Touch responsive fighting game for Apple iPhone** (Objective C, XCode, cocos2d) *Fall 2009*
- Developed a fighting game for Apple iPhone using objective-C and cocos2d framework
 - Programmed various moves of the player based on the shapes (e.g. cross-x, circle-o, tick-✓ etc.) drawn on iPhone screen
- Network racing game simulation** (C, UNIX) *Fall 2008*
- Simulated a network racing game in which different mobile units (Clients) race to reach the target (TCP server) with the help of check-points (UDP Server)
 - All the communication takes place over UDP and TCP sockets
- USC transit system** (Java Swing, JDBC, Oracle 10g) *Fall 2008*
- Developed a GUI application that allows a user to find the location of trams, students, stops and various routes on USC map
 - The system accepts user's input to draw geometrical shapes to query specific region
 - Utilized Oracle spatial data types and used Oracle spatial features to query the database
- M/M/2 queue simulation**(C, UNIX) *Fall 2009*
- Emulated an M/M/2 queue using Multithreading and Signal Handling to keep track of multiple client requests and display various statistics
 - Synchronization and deadlocks handled in multiple threads using condition variables and MUTEX
- Distributed peer to peer file sharing system** (C++, UNIX) *Fall 2009*
- Designed and implemented a de-centralized peer-to-peer distributed file system based on OSPF routing using sockets and posix threads
 - Implemented functionalities to :
 - store the file (file gets replicated probabilistically)
 - delete files (also destroy all copies of it)
 - perform various types of searches
 - retrieve files based on the result of a search
 - Used Bloom filter, Nonce, Bit Vector and SHA1