

841 West 23rd Street, Apartment # 10, Los Angeles, California 90007 | +1 323-215-8060
EMAIL:adkarira@gmail.com, karira@usc.edu
WEBSITE: www-scf.usc.edu/~karira

A D I T Y A K A R I R A

OBJECTIVE

To acquire a challenging career in the field of Computer Science

EDUCATION

University of Southern California, Los Angeles, CA, August 2009 – Expected May, 2011

- Masters Degree in Computer Science with current GPA of 3.45 out of 4.0
- **Relevant Coursework:** Web Technologies, Database Management System, Analysis of Algorithms, Operating Systems, Introduction to Computer Networks, System Security, Computer Graphics
- **Current Course Work:** Computer Communications
- **Projects:**
 - Developed a Peer-to-Peer File Sharing System in C/C++ which implemented join, keepalive, Time to Live, auto shutdown, notify, check and status messages.
 - Developed a Application using the Socket Programming in C/C++ which communicates with a server using TCP to perform IP Address Request, File Request and File Size Request on a UNIX Platform.
 - Created a C/C++ Application using pThreads and inbuilt queue that demonstrates the working of a M/M/2 Queue and displays a report after the execution of the program.
 - Wrote a Technical Paper on 'Different Security Measures in Wireless Network' as a part of System Security Course.
 - Created a website that simulates a Formula One Store (Employee Side) using JSP, HTML, CSS, DHTML
 - Developed a Web based application using AJAX, XMLHttpRequest, Javascript, JSON, Java Servlets that performed Flickr and Facebook mashup involving Google, Facebook and Flickr API
 - Created a website which displayed summarized tabulated results of Youtube Search using PERL as server side Scripting
 - Created a webpage that displayed a collapsible accordion widget using HTML, Javascript, XML DOM, jQuery and CSS
 - Designed a Database Management Systems application using Oracle 10g, Oracle's Spatial Features and JAVA (GUI & JDBC) that performed queries on Spatial Database
 - Implemented Locks and Condition Variable in Nachos (Simulation of an Operating System) using C/C++ to solve the synchronization problems in an Operating System. Using this developed a kernel level code which simulates the working of an airport.
 - Developed system calls for Executing a process, Forking a thread and Locks and Condition Variables using C/C++ alongwith adding the capability of Multiprogramming in Nachos. Using this developed userprogram which simulates working of an Airport.
 - Designed the Token Ring Algorithm for Distributed Mutual Exclusion and the Ring Election Algorithm to handle failure on the distributed system.
 - Developed a Socket Program to simulate a Central Library System using TCP and UDP as Transport Layer Protocol in C/C++ which was implemented using pThreads.
 - Created an OpenGL application to render various Spline Curves in 2D and 3D for Computer Graphics.
 - Performed Lab Experiments on ARP Spoofing, Packet Sniffing, Cryptography, Tunnels and VPNs, Firewalls and Intrusion Detection.

Thadomal Shahani Engineering College, Mumbai University, India August 2005 – May 2009

- Bachelors Degree in Computer Engineering, graduated with a First Class
- **Relevant Coursework:** Web Technologies, Advanced Databases, Operating Systems, Data Structures, Computer Graphics, Distributed Computing, Computer Networks, System Security.
- **Project:** Developed an "API in JAVA for implementing Multifactor Authentication" for Bhabha Atomic Research Center as part of the Final Year B.E. Project

ACTIVITIES & ACHIEVEMENTS

- Received the Ratan Tata Trust Scholarship Award for academic excellence in the first year of Engineering
- Working as a Technical Support Assistant for USC Athletics, **August 2009 - Present**

SKILLS

- **Systems:** Windows Operating System, UNIX
- **Programming Languages:** C, C++, Java, OpenGL
- **Web:** Javascript, HTML, AJAX, DHTML, CSS, XML DOM, XSLT, ASP, Java Servlet, Apache, Tomcat, IIS, Perl Scripting, JSP, jQuery, JSON, REST
- **Database:** Oracle 10g, SQL, XQuery, MySQL