

# SAGAR TEWARI

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## OBJECTIVE

Actively seeking internship in an organization that utilizes my core technical, interpersonal and problem solving skills to the best of my capability

## EDUCATION

### Masters in Computer Science

University of Florida, Gainesville, FL

May 2017

Relevant coursework: Operating Systems, Computer Networks, Software Testing and Verification, Analysis of Algorithms, Advanced Data Structures, Embedded Systems

### Bachelor of Technology in Electronics and Communication

Jaypee Institute of Information Technology, India

May 2015

## ACADEMIC PROJECTS

**Personal Website:** Build a personal website from scratch using HTML, CSS, javascript and jQuery March 2016

**Peer to Peer Network:** Implemented an application similar to Bit-torrent using Socket Programming in Java. First peer splits a file into small chunks of 32 KB each and shares the chunks with other incoming peers. Used multi-threading to send chunks to peers by sockets. Peers would then then exchange chunks between them with multiple downloading threads and multiple uploading threads. January 16 - April 16

**Research Project:** Improved the compression ratio of ASCII code compression technique (IEEE research paper technique) by integrating the compression technique with Huffman encoding in Java April-15

**MIPS Simulator:** Created a Java program that shows the step by step working of a Petri Net simulator. It displayed working of fetch, decode, load, store and add functions on 32-bit instructions April 15 - May 15

**Dictionary Based Code Compression and Decompression:** Implemented a Dictionary based code compression and decompression algorithm, which takes 32 codes from an input file and compresses it on the basis of a dictionary (contains 8 entries on the basis of their frequency in input file) and using 4 encoding techniques (Direct Match ,No Match, 2-Bit Consecutive Mismatch , 2-bit Anywhere Mismatch). The other part of the project decompresses the given compressed file thus retrieving the original text March 2015

**Routing Scheme Using Binary Trie:** Implemented Dijkstra's algorithm using Fibonacci Heap in Java. Then modified the algorithm so as find the shortest path between two IP addresses in the routing scheme using Binary Trie. February 2015

**Korn-like Unix shell built in C:** Successfully implemented Enviroment Variable Expansion Lex file Yacc file alias alias name word unalias name setenv variable word printenv unsetenv variable cd cd word\_directory\_name reading in and executing file bye metacharacters white space multi token arguments some error handling wildcard matching alias executes | piping parses string and executes commands February 2015 - April 2015

**Banking management system:** A basic banking system that, advertises the bank, helps user get the credit card of his choice and also provide loan interest and tax calculator service March 13 - May 13

## AWARDS/CERTIFICATIONS

**College of Engineering Achievement scholarship Award for New Engineering student at University of Florida,**

January 2016 - Present

**Introduction to Mobile Application Development using Android** edX, License 066fd1a325a84dfeae17686c4f7bf729

**Introduction to jQuery** edX, License 0302d9099fee4e2bba60db0cbc8d97da September 2015 - October 2015

**INF201.13x: Introduction to Cloud Computing** edX, License 1e135388320a4bfca97f34a041e5ce33

## SKILL SET

**Programming Language:** Java, C, C++ **Web Technologies:** HTML, CSS, javascript, jQuery

**Software Package:** Eclipse IDE, Microsoft Office, Adobe Photoshop, NetBeans IDE

## EXTRA CURRICULAR

- I am a gamer with more inclination towards first person shooting games
- I love to play basketball, table tennis, cricket, lawn tennis and captained my undergraduate team in these sports
- I play Indian classical music instruments as well as an avid listener of classical rock