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EDUCATION

Master of Science, Computer Science, University of Southern California, Los Angeles, California. *December 2019*
Coursework: Algorithms, Programming Systems Design, Web Technologies, Computer Networks, Artificial Intelligence, Information Retrieval, Operating Systems, Database Systems

Bachelor of Technology, Electronics and Communication Engineering *July 2013 – June 2017*
SRM University, Chennai, Tamil Nadu, India.
Coursework: Computer Architecture, Computer Networking, Digital System Design, Embedded Systems, Data Structures.

Undergraduate Visiting Student, Massachusetts Institute of Technology *February 2016 – June 2016*
Massachusetts Institute of Technology, Cambridge, Massachusetts
Coursework: Computational Structures, Intro to Computational Thinking and Data Science, Machine Learning (Audit), EECS Research Project

EXPERIENCE

Front-end Software Developer, USC Center for Systems and Software Engineering *Aug 2019 – Present*
- Working as a front-end software developer for a web application called SQUAAD (Software Quality Understanding by Analysis of Abundant Data) – that allows users to analyze different quality metrics of software systems as it evolves over time.
- Performing UI enhancements, bug fixes and implementing new features using React.js and Redux.

Member of Technical Staff Software Engineering Intern, VMware Inc, Palo Alto *May 2019 – Aug 2019*
- Worked with the vSphere UI team to develop a UI feature for the vSphere Web Client – VMware's cloud computing virtualization platform. The feature introduced theming for vCenter servers in the web client, allowing users to differentiate between different vSphere environments in the application. Wrote unit and end to end tests for the feature.
- Feature went into production, subsequently being released to a small set of users for feedback – (https://labs.vmware.com/flings/vsphere-html5-web-client#changelog) - **Fling 4.3.0 - Build 14483008**

Software Intern, MIT Media Lab, Cambridge, Massachusetts *March 2016 – July 2016*
- Researched different mechanisms in Game Theory which promote and maintain human cooperation and its relative efficiency in sustaining the cooperation.
- Designed an online experiment where human participants interacted with bot confederates in a 10-round public goods game (PGG).
- Built a dynamic responsive web application for the online experiment. Developed the user interface for the application using HTML, CSS, jQuery, Angular and MeteorJS. Used MongoDB to store player data.
- Configured the application to work with Amazon Mechanical Turk using MTurk API's to incentivize volunteers to play the online game.

PROJECTS

Weenix Kernel *March 2019 – May 2019*

Collaborating in a team of 3 to implement Weenix Operating System – a miniature of Linux using QEMU emulator in C language. Completed implementation of kernel modules such as processes and threads, Virtual File System, Virtual Memory Management and User processes.

Travel and Entertainment Search Web application *March 2018 – April 2018*

Developed a responsive web application which searches for Travel and Entertainment options in and around a particular location. Utilized Google Places API, Google Maps JavaScript API and Yelp API to show search results and place details including place information, photos, reviews. Google Maps API was used to display maps and routes to a chosen destination. Constructed backend server using Node JS and Express JS. Frontend developed using HTML, CSS, JavaScript, Bootstrap, JQuery, AJAX and Angular JS. Added functionality to allow users to store favorite destinations in browsers local storage. Deployed the web application on AWS Elastic Beanstalk.

Multithreading token bucket emulation *Feb 2019 – March 2019*

Implemented a first in first out (FIFO) scheduler in C using multithreading in a single process to emulate a traffic shaper. Created four different threads to perform four different tasks – packet arrival, token arrival and two server threads, concurrently. Used mutexes and condition variables to implement guarded commands.

Web Search Engine for New York Post Website *Sept 2018 - Nov 2018*

Set up a search engine using Apache Solr and Lucene to return the most relevant pages for a query using PageRank algorithm to rank results. Built an inverted index of web pages using a Map-Reduce program in Hadoop and configured Solr for autocomplete and spell correction.

TECHNICAL SKILLS

Languages - Java, C++, Python**. | Web Technologies & Frameworks** – HTML, CSS, JavaScript, Bootstrap, jQuery, Angular JS, React.js, Redux, Angular, TypeScript, Node JS, MeteorJS, ExpressJS, JSON, PHP, XML, Flask, Hadoop, MapReduce, AWS, Apache Solr, Spring MVC, Jasmine, Karma | **Mobile** – Android | **IDE –** NetBeans, Eclipse, BlueJ, IntelliJ, PyCharm | **Databases** – MySQL, MongoDB **| Operating Systems –** Windows, Linux | **Version Control –** Git