ANISH PARIKH

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EDUCATION

Carnegie Mellon University, Pittsburgh, PA Expected: May 2015
Master of Science, Information Networking **GPA: 3.76/4.00**
Relevant Courses: Intro to Computer Systems , Fund. of Embedded Systems, Mobile Hardware for Software Engineers, Fund. of Networks, Distributed Systems, Cloud Computing , Engineering Distributed Systems **(Fall 2014)** Real-Time Embedded Systems, Search Engines, Data Mining, Image Video and Multimedia

Nirma University, Ahmedabad, Gujarat, INDIA May 2013
Bachelor of Technology, Electronics and Communications Engineering **GPA:8.54/10.00** (Rank: **5 / 157**)

EXPERIENCE

Carnegie Mellon University, Pittsburgh, PA August 2014 - Present
Graduate Teaching Assistant - Managerial Economics (14-774) & Business Management (14-775)

Apple Inc., Cupertino, CA, USA May 2014 - August 2014
Software Engineering Intern, EFI (Firmware)
-Responsible for writing support infrastructure for drivers for the various chipsets/peripherals on iOS devices using ***C***
-Designed and developed tools to enable extensive remote debugging of an embedded device using ***Python & C***

PROJECTS

Twitter Analytics Web Service (CMU) March 2014
-Designed, developed and deployed a web service to respond to queries on a Twitter data set using Amazon AWS
-The web service was designed to meet specific cost and performance criteria using ***HBase, MapReduce & MySQL***

Boolean Retrieval Algorithms for Search Engines (CMU) September 2014
-Implemented boolean retrieval algorithms to evaluate various types of query-sets on 'ClueWeb09' dataset using ***Lucene***
-Will be implementing document ranking algorithms and a federated search algorithm as part of Search Engines course

Input Text Predictor (CMU) March 2014
-Created an input text predictor with statistical language model using N-Gram counts
-Stored the counts in ***HBase*** using a ranking algorithm so that they are accessed easily from a user facing web interface

Failure Resilient Distributed Photo Sharing Web Application (CMU) April 2014
-Developed a web application for sharing pictures among multiple users using ***Python based Flask framework***
-Implemented a **two phase commit** protocol for maintaining consistency and failure resiliency among multiple servers

PeerNet - Distributed Social Networking Platform (CMU) February 2014
-Developed a fully-functional distributed social networking platform with major emphasis on user data privacy
-Got exposure to and heavily used ***Node.JS***, ***Javascript***, ***Redis*** and ***Heroku*** to develop the platform

Distributed Message Passing Framework (CMU) February 2014
-Developed a robust mechanism for IPC for local/remote processes using message passing in ***Java***
-Implemented causal ordering of messages, support for reliable multicasting and distributed mutual exclusion

ThermoSmart: Self learning thermostat (Side Project at CMU) August 2013
-Works autonomously ***self-learning*** over a period of time based on the user's requirements & body temperature
-Communicated between peripheral nodes and central hub by using ***XBee*** and ***Python/C++***

Pre-Fetching and De-Duplication Implementation for Coda File System (CMU) February 2014
-Pre-fetching integrated in Coda client and de-duplication feature integrated into Coda server using ***C & C++***

Gravel: A Real Time Operating System Kernel for ARM Processor (CMU) August 2013
-Developed a real-time kernel for ARM with priority based task management supporting 64 tasks
-Designed and implemented context switching, interrupt handler and timer driver for the kernel in ***ARM Assembly***
-Implemented mutex for concurrency control and Highest Locker protocol to bound priority inversion in ***C***

General purpose Dynamic Storage Allocator and Multi-Threaded Web Proxy with Caching (CMU) Summer 2013
-Implemented a fast and highly efficient dynamic memory allocation library in ***C***
-Designed and implemented a robust web proxy with support for concurrency and caching in ***C***

SKILLS

Cloud Computing, Distributed Systems, Embedded Systems, Software Development, Computer Networks
Languages: (Proficient) JAVA, Python, C, ARM & x86 Assembly; (Intermediate) C++; (Beginner) HTML5, CSS, Lua
Platforms: Hadoop, EC2 **Tools:** GDB, LLDB **Operating Systems:** Windows , Linux , Mac OS

PUBLICATIONS

Co-authored a research paper on 'Accelerating Video Carving from Unallocated Spaces' which was presented at the "Media Watermarking, Security, and Forensics 2013" conference held in San Francisco, USA.