DEV PRANAV PUCHAKAYALA
67 HARVARD AVENUE, APT#6 BOSTON MA 02134

puchakayala.d@husky.neu.edu | 603-617-9225 | https://www.linkedin.com/in/devpranav| https://github.com/dev92
AVAILABLE: **June 2016**

EDUCATION

Northeastern University, Boston, MA   May 2016
College of Computer and Information Science   GPA: 3.67/4.0
Candidate for a Master of Science in Computer Science
Related Courses: Programming Design Paradigm, Fundamentals of Computer Networks, Information   Retrieval, Algorithms, Parallel data processing using Map Reduce, Computer Systems, Web Development, Machine Learning

College of Engineering, Anna University, Chennai, India   April 2014
Bachelor of Engineering in Electronics and Communication   GPA: 8.98/10
Related Courses: Fundamentals of Computing, Unix programming, Data Structures and Object Oriented Programming using C++, Computer Architecture, Embedded Systems.

TECHNICAL KNOWLEDGE

Languages: C, C++, Java, Python, Matlab, R(basics), Swift(basics), Racket
Web development: HTML5, CSS, AngularJS, NodeJS, ExpressJS, PassportJS
Technologies/Database: Apache Spark SQL, Apache Hadoop, Pig, HBase, ElasticSearch, MongoDB
Certifications: Java Se6 Programmer (1ZO-851), CCNA (640-802), CCNP (642-902,642-813,642-832)

WORK EXPERIENCE

Goldman Sachs LTD., Bangalore, India   June-August 2013
Software Engineer Intern (Summer Analyst Program)
- Developed a tool to generate CML templates dynamically for various Config files using Python
- Parsed various files and extracted required fields to form the CML template syntax.
- Completed the project successfully within given duration and was offered a full-time job opportunity as a software developer.

ACADEMIC PROJECTS

Machine Learning Algorithms (Python)   January – April 2016
- Implemented simplified SMO algorithm for SVM classification problem and tested with Digits Dataset
- Implemented a Multilayer Perceptron algorithm with one hidden layer and varying number of hidden nodes.
- Created Hidden Markov Model and implemented Viterbi algorithm to perform part of speech tagging.

Web Development (MEAN STACK, PassportJS, Bootstrap)   January – April 2016
Homepage: webdev2016-puchakayaladev.rhcloud.com
- Developed a FormMaker application allowing users to create forms.
- Developed a simple movie social network application called CinePhilia allowing users to search for movies, rate, review and like, users can also see other users and connect to them by sending friend request and also invite friends for a movie night out. Used TMDB and OMDB API for search results.
- Used HTML for view, Angular for client side, Node and ExpressJS for server side development and MongoDB for persistent data storage and used PassportJS for user session management.

Amazon Movies Review Analysis (Java, MapReduce, SparkSQL)   December 2015
- Implemented MapReduce task to identify top K helpful reviewers from huge Amazon Movie Review Dataset.
- Performed data feature enhancement by querying the Amazon Product Advertising API and OMDb API using parallel Web Crawling in MapReduce.
- Joined the crawled data using SparkSQL and provided movie recommendation through the web service that recommends movies based on the genre and type of rating which the user selects from the front-end

File system implementation, Threads synchronization and context switching   October -December 2015
- Developed a C program using POSIX threads to solve deadlock scenario in Dining Philosophers problem by making use of mutex locks and condition variables.
- Developed a C program to replicate file system similar to Linux ext2 with functionalities such as mkdir / rmdir / truncate / ls / ls –l / read and write. Used Fuse Interface on Linux to test the file system.
- Developed a C program to switch between two programs, by manipulating stack pointers.

Average Flight Delay (Java, MapReduce, Pig and HBase)   November 2015
- Create a MapReduce Task to calculate Avg Flight delay for all two legged flights from ORD to JFK from a huge dataset.
- Developed a logic to perform Join operation to form valid flight pairs to satisfy required conditions.
- Implemented same program in Pig Latin scripts using Join and Filter functionalities. And also used Hbase as an index.

Retrieval Models, Indexing, Machine Learning (Python, Sci-Kit, ElasticSearch)   January-April 2015
- Developed a code to efficiently index a large collection of text documents in hard disk and also to index in Elasticsearch using API.
- Calculated scores based on Vector space and language models for given queries and obtained good precision values.
- Implemented Decision Tree algorithm from Python Sci-Kit library to train and test data by using the calculated scores as features, the obtained results showed good precision on test data.