Rajkumar Murukeshan

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Available: **January – August 2017**

EDUCATION

Northeastern University, Boston, MA, USA — September 2015 - Present
College of Computer and Information Science — Expected graduation: December 2017
Master of Science in Computer Science, **GPA: 3.47**
Courses: Algorithms, Program Design, Web Dev, Database, Information Retrieval, Software Development, MapReduce

Anna University, Chennai, India — April 2011
Bachelor's Degree in Electronics and Communication Engineering with **Distinction**
Courses: Object Oriented Design, Data Structures, Computer Networks, Microprocessor, VLSI Design

TECHNICAL SKILLS

Languages	Java, JavaScript, C, C++, Racket, HTML, Shell Script, Perl
Database Platforms	MySQL, MS SQL, Teradata, MongoDB, Oracle
Web Frameworks	AngularJS, Express, Node.js, RESTful APIs, Web Services, Bootstrap, jQuery
BI/ DW Tools	Informatica 9.1/9.5, SSAS, SSIS & SSRS using MS BI Development Studio
Operating Systems	Linux, Mac OS, MS Windows

WORK EXPERIENCE

Infosys (Client: Bank of America), India — February 2012 – June 2015
Senior Software Engineer

LoanIQ – Mainframe Legacy Files Migration to Hadoop

- Migrated files and jobs from mainframe legacy system to Hadoop Distributed File System (HDFS) with bzip2 compression technique thus reducing the software licensing fee by $90,000 annually
- Achieved increase in speed for batch processing by 60% after the migration

Wholesale Credit Model (WCM)

- Designed and developed common ETL component to re-use in all applications across WCM project
- Created Informatica mappings, sessions and workflows between source systems and warehouse components
- Extracted data from different sources and performed data cleansing, data manipulation and data quality tests
- Performed query tuning techniques in Teradata database that enhanced the performance of the system by 40%
- Collaborated with testing team and wrote re-usable test scripts that increased the productivity by 166%

ACADEMIC PROJECTS

Xplore – Web Development Project (JavaScript), *Northeastern University* — May – June 2016
http://webdev-msrjkmr.rhcloud.com/project/index.html#/main (username- raj/password- raj)

- Built a MEAN stack single-page web application (SPA) that provides users to get access to information about various locations around the world and share their reviews with other users
- Consumed data from Foursquare by making third-party http-based RESTful API calls from the client side
- Provided social networking features such as searching other users by username, sending/accepting/rejecting friend requests, posting comments on friend's timeline and sharing a subset of profile information

Information Retrieval System (Java, Jsoup Library), *Northeastern University* — March – April 2016

- Developed advanced search engine with BM25, Lucene and tf-idf as retrieval models on 1000 text documents
- Performed stopping, stemming and indexing on the corpus data and applied query expansion techniques like Pseudo-relevance feedback and Thesaurus using WordNet Java API
- Calculated Precision, Recall, Precision@RankK with K= 5 and 20, mean average precision (MAP), mean reciprocal rank(MRR) to assess the performance of the search engines

Website-Ranking using PageRank Algorithm (Java), *Northeastern University* — March 2016

- Implemented Google's PageRank algorithm that computes page rank for a collection of 183,811 web documents - the famous WT2G collection, until convergence which is measured by Shannon entropy

Web Spider (Java), *Northeastern University* — February 2016

- Developed a simple web crawler that crawls from a seed URL to a depth of 5 using BFS and DFS algorithm
- Designed the crawler in such a way that it respects politeness, selection and re-visit policies