Arnav Ahire

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EDUCATION:

- **Masters of Science in Computer Science.** **Anticipated Graduation Feb 2018**
  State University of New York at Buffalo, Buffalo, NY, USA. **GPA- 3.67**
  Courses - Analysis of Algorithms, Software Engineering Concepts, Information Retrieval, Computer Security, Distributed Systems, Machine Learning, Computer Architecture, Data Intensive Computing & Data Mining.
- **Bachelor of Engineering in Computer Engineering.** **Aug 2010 - May 2014**
  Savitribai Phule Pune University, Pune, India **GPA-70.00% (First Class with Distinction)**

TECHNICAL SKILLS:

- **Programming languages:** Core Java, R, Python, Android, C, C#, VHDL.
- **Tools & Technologies:** Amazon Web Services (AWS), MapReduce, Android Studio, Jupyter Notebook, Apache Solr, Lucene API, Tableau, HDFS, Eclipse IDE, SQL-Server Database, .Net, GitHub, BitBucket, MS Office.
- **Web development:** HTML5, CSS3, JavaScript, Bootstrap JS, XML, JSON, JSP.

WORK EXPERIENCE:

Infosys Limited (Chennai, India) Systems Engineer ***June 2014 – February 2016***

- Worked on a project for 'Sysco' which is a food distribution company based in US.
- Performed data migration of 100+ inventory servers from Windows 2003 to 2012 R2 which improved turnaround time for performing queries on underlying data.
- This migration helped the end users in accessing the servers with improved availability and faster response.

ACADEMIC PROJECTS:

- **Clustering Algorithms** ***October 2017***
  Studied and performed three clustering algorithms (K-means, Hierarchical Agglomerative with Single Link and Density Based clustering) in Java and performed the parallelized version of K-means using Hadoop MapReduce.
- **Replicated Key Value Storage** ***April 2017***
  A simple implementation of Amazon Dynamo DB (Replicated Key Value Storage) which involved Partitioning, use of Quorom Replication and also facilitating failure handling (1 failure node amongst 5 nodes).
- **Simple Distributed Hash Table (DHT)** ***April 2017***
  Developed a simple distributed hash table based on the design of Chord. Three things implemented in this project in addition to creating a content provider were ID space partitioning, ring-based routing and node joins.
- **Text Processing using Hadoop MapReduce** ***April 2017***
  Performed text processing (lemmatization) on a set of documents containing Latin Text and performed word co-occurrence on these documents using MapReduce.
- **Data Cleaning and Munging** ***March 2017***
  Converted raw XML data to a readable structured format (.csv) in R, extracted and transformed the data from Kaggle SQLite European Soccer database into data frames for question-answering and transformed the data collected from Pew survey into relevant graphs through exploratory data analysis (EDA).
- **Group Messenger- Android** ***March 2017***
  Implemented a group messenger in Android with ISIS algorithm for total ordering of multicast messages. Also implemented a content provider to store and retrieve messages and their sequence numbers from processes.
- **Data clients and Information Servers** ***February 2017***
  Performed Twitter Data Extraction using Twitter REST API and processed the data using a library 'twitteR' of R programming language. Also visualized the extracted data on a real world map using 'ggplot2' package of R.
- **Data Ingestion and Solr Setup** ***September 2016***
  Collected Tweets through Twitter API using Java in a document (.json format) and performed indexing on the same using Solr and checked whether correct terms were indexed by firing appropriate queries.

SEMINARS:

- **Java Path Finder (JPF)** ***April 2017***
  Discussed the architecture and working of a model-checking and software verification tool for Java programs.
- **Bit-Torrent** ***April 2013***
  Discussed importance, terminologies, vulnerabilities and their solutions of a file sharing protocol 'Bit-Torrent'.

PUBLICATION:

- **Self-Adaptive Energy Conserving Cloud Storage System** ***February 2014***
  International Journal of Engineering Research and Technology (IJERT)