

## Education

- Master of Science in Computer Science** Expected Dec 2014  
• *The University of Texas at Dallas, Richardson, Texas* GPA: 3.959/4  
Thesis: Statistical Classification and String Manipulation Algorithms using MapReduce
- Bachelor of Technology in Electrical Engineering** August 2010  
• *Indian Institute of Technology (IIT) Bombay, Mumbai, India* GPA: 7.46/10

## Relevant Coursework & Programming Skills

- Design and Analysis of Computer Algorithms
- Artificial Intelligence
- Advanced Database: Big Data Analytics
- Database Design
- Machine Learning
- Natural Language Processing
- Discrete Mathematics
- Operating Systems Concepts

**Languages:** Python, Java, C++

**Operating Systems:** Linux, Windows

**Miscellaneous:** Hadoop, MapReduce, Pig Latin, Hive, Mahout, Cassandra, MySQL, Git, MATLAB

## Research Projects

- Brown University** Providence, Rhode Island  
• *Distributed memory abstraction* May 2013 - June 2013
  - Constructed a new system for **Big Data** Analytics using LLVM and Julia.
  - Performed in-memory computations on large clusters in a fault-tolerant manner.
- Institut National De Recherche En Informatique Et En Automatique** Paris, France  
• *Hybridization Methods for the analysis of Biomolecular Networks* May 2009 - July 2009
  - Proposed a new mathematical model to calculate *Violation Degree*
  - Composed a **MATLAB** library to implement this model
  - Increased the calculation speed of *Violation Degree* by about 30 times
  - Fashioned the library to guide the search for models satisfying a given specification.

## Academic Projects

- Comparative analysis of approaches to sentiment analysis of tweets** Jan 2013 - May 2013  
• *Guide: Prof. Latifur Khan*
  - Implemented twitter data processing in **Java** to predict the ratings of movies.
  - Employed standard lists of positive and negative words to classify each tweet.
  - Used the sentiment140 api for the classification using **MapReduce**.
  - Created a classification model with naive Bayes method in **Mahout** to classify tweets.
- Simulating Nine Men's Morris board game** Jan 2013 - May 2013  
• *Guide: Prof. Haim Schweitzer*
  - Designed and developed this AI project in **Python** employing alpha-beta pruning algorithm.
  - **Winner** in the tournament for the game in the class (76 students).
  - Wrote reliable and fast code and devised innovative static estimation algorithms.
- Database Design and Implementation Project** Aug 2012 - Dec 2012
  - Compiled a conceptual design (EER model) for a large custom City library database project.
  - Developed a relational schema in third normal form for this design.
  - Wrote **SQL** statements to create database, populate tables and solve challenging queries.

➤ Assembled the database in Oracle and used a database state to verify the correctness of queries.

• **Date-Intensive Text Processing of White House Visitor Log** *Jan 2013 - Feb 2013*

➤ Wrote programs in **Java** and applied Hadoop **MapReduce** chaining to derive statistics.

## Professional Experience

• **Research Assistant** Nov 2013 - Present  
*Data Management & Data Mining Lab, The University of Texas at Dallas* *Richardson, Texas*

• **Software Developer** Jan 2011 - June 2012  
*Future Bazaar* *Mumbai, India*

➤ Head of the *Analytics and Business Intelligence* Team.

➤ Designed an architecture to carry out ETL processes.

➤ Built the E-commerce platforms for *futurebazaar.com* and *chaupaati.in* using **Django**.

➤ Constructed modules for using api's of BI tools.

➤ Conceptualized and implemented Order Life-cycle Management, a system to assign and regulate order-states to the order-items using **Python**.

➤ Developed an interface for the sellers to track orders, sales summary and product reviews, upload product inventory and edit profile settings.

• **Math Lab Tutor** Jan 2013 - Present  
*The Student Success Center, The University of Texas at Dallas* *Richardson, Texas*

➤ Tutor students at UT Dallas on an individual or group basis.

➤ Assist in a variety of subject areas including math, physics and statistics.

## Honours

- All India Rank 94 in Indian Institute of Technology Joint Entrance Exam 2006 among 300,000 students.
- Selected from the state for the 4th Invitational World Youth Mathematics Intercity Competition.