

Education

Master of Science in Computer Science , State University of New York, Buffalo	GPA: 3.482	2014
B. Tech. in Computer Science , Jaypee Institute of information Technology, Noida		2010

Skills	Adept	Working Knowledge
Languages	Java, Python, Perl	C/C++, C#, Matlab,
Web Technologies	HTML, Javascript	PHP, Ruby on Rails, jQuery, CGI, JSP
Big-Data Technologies	Apache Pig	Apache Spark, Apache Hadoop, Apache Solr, MongoDB

Independent Projects

Memodiction	An Android app that lets you learn and revise words to build your vocabulary intelligently
ShortCleaner	A JAVA library to clean and normalize tweets for consuming it for various kinds of analytics.
jTextBrew	A JAVA library for fuzzy string matching, based on TextBrew algorithm by Chris Brew
Tweetiments	A simple web based tool to know the sentiment of a particular twitter user (Tweetiments.com)

Experience

NLP Engineer, April 2015 - Present, FactSet Research Systems inc., New York City

- Duplicate document identification (**Java, Shell Scripts**)
 - Used *Shingling* and *Vector Space Model* algorithms to detect duplicate documents from a stream of documents.
- Statistical Machine Translation (**Moses, Python**)
 - Building a language translation engine similar to google translate, for Polish, based on principles of statistical machine translation.
 - The cleaning, tokenization, stemming and other language processing is done by using nltk and other NLP libraries in python.
- Earning and Stock Correlation using Social Media Sentiments (**Python, Java, PredictionIO**)
 - Exploratory project to find correlation between social media sentiments with earnings and stocks of a company.

Research Engineer, July 2011 - July 2013, TCS Research Labs – Delhi

- **Event Detection in Time Series** (**Java, Python, Perl, Shell Scripts, Rapidminer**)
 - Worked on a research project involving *multivariate time series with application to classification of events*.
 - Devised an algorithm based on Shape Context for finding frequently occurring patterns and events, with as good results as SAX, DTW etc. with 7% better results in the particular domain of car sensors.
- **Data Harmonization Framework (DHF)** (**Java, Apache Pig, XML**)
 - Implemented an *ETL framework* that exploits the power of map-reduce and big-databases to fuse incongruous enterprise data from disparate sources in near real time.

Software Development Engineer, December 2010 - June 2011, TATA Consultancy Services – Trivandrum

- **Learning Management System** (**PHP, MySql, jQuery**)

Conferences and Publications

- "Inferring latent attributes of an Indian Twitter user using celebrities and class influencers", ACM Hypertext 2015
- "Inferring gender of a Twitter user using celebrities it follows", CORR 2014
- "Architecture for Automated Tagging and Clustering of Song Files According to Mood", IJCSI, 2010

Academic Projects

- **Inferring gender of a Twitter user using celebrities it follows** (**Java, Python, Perl, Google API, Apache Pig**)
This project classifies gender by leveraging observable information such as the tweet behaviour, linguistic content of the user's Twitter feed and the celebrities followed by the user.
- **Quena- A Question and Answering system** (**Java, Apache Solr, Stanford NER, Stanford POS tagger, Apache Pig**)
Indexed 1.6 Million Wikipedia documents, designed a question parser and a ranking algorithm based on popularity.
- **Clustering of songs according to mood** (**Matlab, Perl, C#**)
Using music information retrieval techniques, extracted several features from songs and designed an algorithm, to cluster songs based on moods.
- **English to Hindi Translation and Transliteration** (**C, Gambas**)
Developed tools for Translation using *Hidden Markov Model* and a rule engine engine for Transliteration and word reordering.
- **PSLFS – Virtual File system** (**C**)
A simple file system using K-ary data structure. Won 6th position in ICC 2008.