Souradeep Sinha

▄▄▄ Education

2014–2016	**MS in Computer Science**	*Syracuse University*

GPA (out of 4) - 3.52

Relevant Coursework: Analytical Data Mining, Fundamentals of Data Mining, Design and Analysis of Algorithms, Cryptography

2010–2014	**BTech in Information Technology**	*West Bengal University of Technology*

GPA (out of 10) - 8.44

Relevant Coursework: Database Management Systems, Computer Networks, E-Commerce, Information and Coding Theory, Operations Research, Engineering Mathematics

▄▄▄ Professional Experience

Related Experience

2015–Present	**Graduate Researcher**	*Data Lab, Syracuse University*

Advisor: Dr. Reza Zafarani, Area of Research: Social Networks, Social Media Mining
- Implemented Bloom filter in Python to block spam accounts with 0.12% false positives
- Tested intrusion detection techniques using Weka's Naive Bayes, J48 Decision Tree and kNN classifiers as well as Liblinear's SVM classifier
- Investigated psychology and computer science research on deception and provided feature recommendation for analysing deception in social data
- Collected, cleaned, preprocessed data using Python, Selenium and Beautiful Soup

2013–2013	**Data Analysis Intern**	*Quikr,* India

- Investigated online advertisement data to identify consumer trends and buying patterns
- Developed statistical and predictive models that helped increase customer engagement time on premium ads by 14%
- Provided graphical recommendations to increase user bounce times

2013–2014	**Database Lab Administrator**	*Institute of Engineering and Management,* India

- Developed MySQL queries to effectively test core concepts of relational databases
- Designed course project with appropriate Visio schema diagrams and sample data to facilitate stored procedures, functions, triggers and error handling
- Collaborated and formulated a lesson plan aimed at increased student participation in labs

Additional Experience

2014–Present	**Late Night Manager**	*Student Centers and Programming Services,* Syracuse
2015–2015	**Summer Staff**	*Reservations and Building Operations,* Syracuse
2015–Present	**Event Staff**	*Events and Technical Services,* Syracuse
2010–2014	**Business Development Associate**	*In Good Taste,* India

Projects

α-Tweet   *Syracuse University*
o Designed scraper bot to collect tweet history for users and their followers
o Used NLTK to perform word tokenization and TF-IDF filtering to clean data
o Modified Naive Bayes algorithm and Pearson's coefficient and identified negative correlation between tweet words and retweet possibility

AWS elasticity analysis with EC2, S3 and DynamoDB   *Syracuse University*
o Designed shell scripts to enable command line autologins to multiple EC2 instances
o Automated the procedure of data upload, download and performance monitoring with simple Python Boto3 API calls

Comparative study on dimensionality reduction techniques *Syracuse University*
o Compared Random Projection and PCA to reduce a synthetic dataset of 60 features
o Employed Agglomerative Hierarchical Analysis with Conditional Entropy and Normalized Mutual Information for cluster validation

ID3 Decision Tree with Python   *Syracuse University*
o Implemented a model capable of training and classifying nodes from any input dataset with varying parameters and splitting threshold values

Skills

{Languages}	Python, Java, R	{DB/rDBMS}	MySQL, SQL Server 2010
{Big Data}	Hadoop, MapReduce, HiveQL	{AWS Stack}	EC2, S3, DynamoDB
{OS}	Linux, Unix	{Packages}	Pandas, Scipy, BeautifulSoup, Selenium,

Leadership Roles

2015–Present **Senator** *Graduate Student Organization* Syracuse University

2015–Present **Executive Board Member** *Engineering and Comp Science GSO* Syracuse University

2014–Present **Fellow** *Leadership and Cultural Program* Syracuse University

2014–Present **Graduate Ambassador** *College of Enginering and Comp Science* Syracuse University

Certifications

o The Data Scientist's Toolbox - Johns Hopkins University
o Introduction to Hadoop and Mapreduce - Cloudera
o Data Wrangling with MongoDB - MongoDB

Interests

o Running(10K, 5K), Hiking, Soccer, Tennis
o Geometric Drawing - Fractals, Spirals, Pentagrams, Zentangles, 1-5 Point Perspectives
o Community Service - Child Education in India, Women Empowerment through Craft, Animal Welfare