

# SHOUVIK SHARMA

shouvik19@gmail.com ✉

+1-312-459-2008 📞

Chicago 📍

linkedin.com/in/shouvik-sharma19 in

github.com/shouvik19 🐙

medium.com/@shouvik19 📝

## EDUCATION

### MASTER OF DATA SCIENCE

ILLINOIS INSTITUTE OF TECHNOLOGY

08/2019 – Present

Chicago, USA

- GPA: 3.71

### MASTER OF STATISTICS

NMIMS

07/2016 – 04/2018

Mumbai, India

- GPA: 3.35

## SKILLS

**Data Science | Analytics:** Linear Regression, Multiple Linear Regression, Logistic Regression, Naïve-Bayes, KNN, Time Series Analysis, AdaBoost, Ensemble Classifier, K- Nearest Neighbor, K-Means Clustering, Hierarchical Clustering, SAS Enterprise Miner, SAS Enterprise Guide, SPSS

**Linear Algebra | Statistics:** Z-test, ANOVA, Chi-square test

**Programming Languages:** Python, R, Spark, Hive, Pig, KornShell

**Deep Learning:** Convolution Neural Network, Recurrent Neural Network, Long Short-Term Memory Network

**Query Language:** SQL Server, Snowflake, PostgreSQL, MSSQL, MYSQL, Microsoft SQL Server, Microsoft Visual Studio, HiveQL, PL/SQL, DDL, MDX, SparkSQL, SnowSQL, NoSQL, SDL, XSD, RDF

**Tools:** Tableau, Power BI, Pentaho, MapReduce, Visual Studio, Prefect, SSIS, SSRS, SSAS, SharePoint, JIRA, Mode, MicroStrategy

**Cloud:** AWS Lambda, AWS S3, AWS EC2, AWS CLI, Kafka, Redshift, AWS Sage Maker, QuickSight

**Certifications:** SAS Certified Base Programmer for SAS 9 in Mar 2017, SAS Certified Predictive Modeler Using SAS Enterprise Miner 14 in Apr 2018, Practical Machine Learning in Dec 2018 from John Hopkins University, Machine Learning Specialization in Feb 2019 from University of Washington, Snowflake Pro Certification September 2020

## WORK HISTORY

### DATA ENGINEER INTERN

Daten Solutions Inc.

05/2020 - Present

Chicago, USA

- Developed data migration pipeline from relational databases like SQL Server to Snowflake, and further performed data modeling on the migrated data
- Automated ETL processes using Prefect (Python), making it easier to query and wrangle data and reducing the time by as much as 40% by performing large-scale data conversions, and transferring BAAN data into standardized formats, for integration into Snowflake

### BUSINESS ANALYST

Cartesian Consulting Inc.

04/2018 – 07/2019

Mumbai, INDIA

- Determined the trend for improving customer retention and reducing churn rate using logistic regression, and represented it by creating a dashboard in MS Excel, this led to a two-fold improvement in the campaign response
- Executed predictive analytics by creating customer one view, customer profiling, customer segmentation after extracting data from PostgreSQL, and translated this analysis into business terms and actionable guidance
- Identified the 'Most Valuable Customer' by deploying Random Forest algorithm with optimization, and design of experiments to achieve a true positive rate of 81%, this led to better customer targeting and improvement in yearly top-line revenue by 13 %
- Executed ad-hoc analysis, market basket analysis, along with the creation of various business trend reports & trackers to analyze patterns & movements in business KPIs for marketing departments of top retail and apparel brands in India
- Performed hypothesis testing to validate whether "Fantasy sports is a game of skill or gamble" using the Chi-Square Test, Linear Regression and paired T-test, the findings successfully published in the Harvard Business Review. ([link](#))

### STRATEGY AND ANALYTICS INTERN

Greeksoft Technologies Pvt. Ltd.

09/2017 – 12/2017

Mumbai, INDIA

- Led a price forecasting project by forming a hypothesis, performing information gathering, and developing a technical analysis of the stock data
- Built an RNN Neural Network model for Live positional trading using Keras package in python where outputs supplemented Bull Spread Strategy in Options Trading, the developed model architecture was backtested for the period from the year 2012 to the year 2017 where it achieved correct market prediction for 71 % of the days; this forecasting architecture is utilized for live trading

### ASSOCIATE ANALYST

Tata Capital Financial Services Ltd.

07/2015 – 07/2016

Mumbai, INDIA

- Drove acquisition channel using a data-driven approach for used-car and two-wheeler dealerships, by building customer scorecard after analyzing different parameters affecting the repaying capacity
- Developed interactive dashboards using MS Excel and Tableau, indicating crucial metrics to drive key business decisions and communicate key concepts to readers
- Led a team of 3 to construct customer risk assessment by developing, automating, and analyzing financial reports and client credit history, which led to a multi-fold increase in corporate lending for the two-wheeler and used cars segment, with 0% NPA cases reported over 10 months

## PROJECTS

- **Stack Overflow Data Analysis (October 2019 -December 2019)** - Analyzed insights about questions posted on stack overflow by extracting data using Google's big query data warehouse; discovered top spammers, expert users, and most valuable customers users by leveraging big data technologies such as Apache Hive, Apache Pig and Apache Sparks ([git link](#))
- **Recommendation System using Yelp (January 2020 – March 2020)** - Built a personalized restaurant recommender web app using the Yelp dataset of restaurants by testing models like Pure Collaborative, Approximate Nearest Neighbour, K-NN, Naive Bayes, and Hybrid Matrix Factorization on different hyperparameters which were tuned using the python library scikit optimizer ([git link](#))
- **Image Mating using CelebAMask-HQ (June 2019 – July 2019)** - Conducted Image Matting using the U-Net architecture of the Convolutional Neural Networks on the open-source Celeb-Mask dataset with an IOU Score of 92% ([git link](#))