

# SHOUVIK SHARMA

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## EDUCATION

### MASTER OF DATA SCIENCE

ILLINOIS INSTITUTE OF TECHNOLOGY

August 2019 – Present

Chicago, USA

- GPA: 3.71

### MASTER OF STATISTICS

NMIMS

July 2016 – April 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

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

**Database:** SQL Server, Snowflake, PostgreSQL, MSSQL, MySQL, Microsoft SQL Server, Microsoft Visual Studio

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

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

**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

**Expertise:** Pricing analytics, statistical modeling, machine learning, forecasting and optimization, data management systems

## EXPERIENCE

### DATA ENGINEER INTERN

Daten Solutions Inc.

May 2020 - Present

Chicago, USA

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

### DATA ANALYST

Cartesian Consulting Inc.

April 2018 – July 2019

Mumbai, INDIA

- Determined trend for improving customer retention and reducing churn rate using logistic regression, led to a two-fold improvement in the campaign response
- Executed geography-wise analysis by creating customer one view and customer profiling, and translated analysis into business terms and actionable guidance
- Identified the 'Most Valuable Customer' by deploying Random Forest algorithm with True positive rate of 81%, this led to better customer targeting and improve yearly top-line revenue by 13 %

### STRATEGY AND ANALYTICS INTERN

Greeksoft Technologies Pvt. Ltd.

September 2017 – December 2017

Mumbai, INDIA

- Led a price forecasting project Technologies Pvt. Ltd. Mumbai, and present finding to senior leadership
- 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 2012-2017 where it achieved correct market prediction in 71 % of the days ; this forecasting architecture is utilized for live trading

### ASSOCIATE RELATIONSHIP MANAGER

Tata Capital Financial Services Ltd.

July 2015 – July 2016

Mumbai, INDIA

- Interview stakeholders to understand business needs and gather requirements ; accordingly build pricing related products using the machine learning algorithms
- Led a team of 3 to construct customer risk assessment by analyzing financial reports and client credit history, which led to a multi-fold increase in corporate lending for two-wheeler and used cars segment, with 0% NPA cases reported over the course of 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 Convolved Neural Networks on the open-source Celeb-Mask dataset with an IOU Score of 92% ([git link](#))
- **Inventory Optimization problem on Kaggle (January 2019 – February 2019)** - Forecasted the demand for LED televisions using Holt-Winter's Smoothing method with MAPE of 20.760 ([git link](#))
- **Book Recommendations from Charles Darwin (July 2020 – August 2020)** – Designed a book recommendation system based on the content utilizing the Charles Darwin's bibliography ([git link](#))
- **ASL Recognition with Deep Learning (July 2020 – August 2020)** – Created a convolutional neural network to classify images of American Sign Language (ASL) letters ([git link](#))