**Shouvik Sharma**

400 E 33rd Street, Apt 515, Chicago, IL-60616|Phone: 3124592008 | [shouvik19@gmail.com](mailto:shouvik19@gmail.com) | [Linkedin](https://www.linkedin.com/in/shouvik-sharma19/) | [Github](https://github.com/shouvik19) | [Medium](https://medium.com/@shouvik19)

**SUMMARY**

Over 3 years of comprehensive work experience in Data Science, Marketing Analytics and Business Intelligence in banking, retail, and supply chain analytics. Ability to solve complex business problems using ETL, Data Warehousing, Machine Learning and Exploratory Data Analysis by working independently, and designing analytical solutions.

**EDUCATION**

* MS in Data Science, Illinois Institute of Technology, **GPA: 3.8** **(08/2019 – 05/2021)**

**Related Courses**: Machine Learning, Big Data Technologies, Applied Statistics, Statistical Learning, Database Management,

Data Preparation and Analysis, Introduction to Algorithm, Data Science Practicum.

* MS in Statistics, NMIMS University, **GPA: 3.35**   **(07/2016 – 04/2018)**

**Related Courses:** Regression Analysis, Estimation, Testing of Hypothesis, Distribution Theory, Linear Algebra and Numerical Methods, Parametric Inference estimation, Probability Theory, Linear Models

* Certifications**:** [Snowflake Pro Certification](https://www.youracclaim.com/badges/f03d4251-13bd-4fd0-9f0d-45ff17bd718f), SAS Certified Base Programmer for SAS 9, SAS Certified Predictive Modeler

**SKILLS**

* **Programming*:*** SQL, Python, R, SAS, Pyspark, HTML, C#, Excel VBA (Macros), Regex, NLP, Adobe Analytics.
* **Big Data Ecosystem**: NoSQL databases, Spark, Hadoop, MapReduce, Hive, Pig, Kafka, Flume.
* **Cloud Technologies**: AWS (S3, EC2, Lambda, Athena, RDS, Redshift, EMR), MATLAB, GCP.
* **Tools*:*** Tableau, Power BI, Powerpoint, RStudio, Jupyter, SAS E-Miner, SPSS, SSIS, MS Office, JIRA, Spotfire, MS Access, Looker.
* **Libraries:** Numpy, Pandas, Matplotlib, Seaborn, Scikit-Learn, Keras, Nltk, Gensim, Scipy, Beautiful Soup, Tensorflow.

**WORK EXPERIENCE**

**Data Analyst at Daten Solutions Inc., Chicago: (05/2020 - Present)**

* Developed and automated **data migration pipeline** from SQL Server to Snowflake and performed **dimensional modeling** on the migrated data using version control in **GitHub** after breaking down strategic problems.
* Using data strategy defined the problem statement further performed **customer segmentation** using **k-mean clustering** in **AWS Sagemaker**, recommended cluster-wise products using **apriori algorithm** which ultimately improved the top-line revenue by **4%.**
* Created **ad-hoc reports** and **tableau** dashboards to explain variation in success **Metrics** and **Time Series Analysis**.
* Developed statistical models like **ARIMA** using statsmodels package in **Jupyter Notebook**, the model achieved an overall accuracy of MAPE 5.96%**.**

**Data Analyst (Practicum Student) at Labelmaster, Chicago: (05/2020 – 12/2020)**

* **Predicted** department-wise sales based on seasonal and external factors, by working with business stakeholders.
* Implemented Statistical methods like **SARIMAX, VAR** along with some hypothesis testing as well as Machine Learning (Deep Learning) Time-Series techniques to large sales data, deployed model using **Azure DevOps**.
* Achieved an accuracy of **MAPE 8%** approx. on price forecasting using Deep Learning algorithms like **LSTM** and **RNN**, applied business acumen to recommend alternatives to the marketing department.

**Data Analyst at Cartesian Consulting: (04/2018- 07/2019)**

* Identified probable customer churn using Predictive Models in Python like **Logistic Regression, Decision Trees, Random Forest** and achieved a true positive rate (**recall**) of 84% for target customer retention and acquisition marketing campaigns.
* Predicted sales by **time series forecasting** using statistical conceptsin **Python** using **neural networks, ARIMAX** and **Prophet** for inventory management by eliminating understocking and reducing overstocking by 56%.
* Identified the ‘**Most Valuable Customer**’ by leveraging the customer data and deploying **Random Forest algorithm** with **True positive rate of 81%**, this led to better customer targeting and improve yearly topline revenue by 13 % for a grocery client.
* Generated visualizations using **Tableau** toanalyze marketing **metrics** for making recommendations and supply chain analysis.

**Data Analyst Intern at Greeksoft Technologies Pvt. Ltd.: (09/2017 – 12/2017)**

* Worked with the **Apache** **Spark** Framework for customer analytics using **Spark** **SQL** queries on large scale datasets for developing flawless **CRM** (customer relationship management) campaigns and deployed them through multiple channels.
* Built an **RNN Neural Network** model for Live positional trading using **Keras** package in python with an accuracy of 71 %.

**Data Analyst at Tata Capital Financial Services Ltd.:  (07/2015- 07/2016)**

* Built **KPIs** and **Regression** models to predict **customer life-time value**, enhance propensity and scoring attributes.
* Accurately extracted insights and created dashboards using **Tableau,** **Excel VBA (Macros)**, **pivot** **tables** and **slicers**.
* Implemented data source identification to formulate ad-hoc reports based on requirements gathered from various stake holders using **JIRA** to provide solutions.

**PROJECTS**

**Stack Overflow Data Analysis Model (Language/Tools- Python, Jupyter Notebook, Spark, Hive, PySpark, Pig):**

* Analyzed insights about questions posted on stack overflow by extracting large data sets 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 HiveQL, Apache Pig and Apache Sparks ([git link](https://github.com/rahulmnair1997/StackOverflow-Data-Analysis))

**Recommendation System using Yelp (Language/Tools- Python, Jupyter Notebook, NumPy, SciPy, pandas, scikit-learn):**

* Built a personalized restaurant recommender web app using the Yelp dataset of restaurants by testing models like Pure Collaborative, Approximate Nearest Neighbor, K-NN, Naive Bayes and Hybrid Matrix
* Factorization on different hyperparameters which were tuned using the python library scikit optimizer ([git link](https://github.com/shouvik19/Restaurant-Recommendation-System-using-Yelp-Dataset))

**Image Mating using CelebAMask-HQ (Language/Tools- Google Colab, regression):**

* Conducted Image Matting using the U-Net architecture of the Convoluted Neural Networks on the opensource Celeb-Mask dataset with an IOU Score of 92%

**Inventory Optimization problem on Kaggle (Language/Tools- Google Colab, Tableau, R studio, Adobe Analytics):**

* Forecasted the demand for LED televisions using different time-series forecasting methods with Holt-Winter’s Smoothing method as the best method with MAPE of 20.760.

**Electronic Vendor Database: (Language/Tools - MySQL, Java 8, HTML, CSS, Bootstrap):**

* Constructed the ER Model and translated into Relational Schema implemented as SQL script.