## **Shouvik Sharma**

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Over 3 years of comprehensive work experience in Data Analysting, Marketing Analytics and Business Intelligence in banking and retail domains. Ability to solve complex business problems using ETL, Data Mining, Machine Learning & Data Warehousing concepts.

#### LEADERSHID

Head of the Sports Department (ISA) - NMIMS, Mumbai, India

(June 2016 - Apr 2018)

• Led a team of 6 volunteers. Coordinated various workshops on Sports Event for 50+ students.

#### **EDUCATION**

• MS in Data Science, Illinois Institute of Technology, GPA: 3.8

(Aug 2019 - May 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

(Jul 2016 - Apr 2018)

Related Courses: Regression Analysis, Estimation, Testing of Hypothesis, Distribution Theory, Linear Algebra and Numerical Methods

• Certifications: Snowflake Pro Certification, SAS Certified Base Programmer for SAS 9, SAS Certified Predictive Modeler

#### **SKILLS**

- Programming: SQL, Python, R, SAS, Pyspark, HTML, C#, Excel VBA (Macros), Talend, Agile Methodology, PostgreSQL, MySQL.
- Big Data Ecosystem: Spark, Hadoop, MapReduce, Hive, Pig, Kafka, Flume, Hbase, Microsoft Azure, Flink, MS Access, Visio.
- Cloud Technologies: AWS (S3, EC2, Lambda, Athena, RDS, Redshift, EMR), NoSQL, Cassandra, MongoDB, Kubernetes, Snowflake, CircleCI, Airflow, Prefect, Salesforce, Airflow.
- Tools: Tableau, Power BI, Azure ML, RStudio, Jupyter Notebook, SSRS, SSAS, IBM-Unica, SSIS, MS Office, JIRA, Presto, Terraform
- Libraries: Numpy, Pandas, Matplotlib, Seaborn, Scikit-Learn, Keras, Nltk, Gensim, Scipy, Beautiful Soup.
- Datasets: HTTP, HTML, XML, JSON, ORC, Parquet
- NoSQL: Mongo, Cassandra
- Shell Scripting: Linux

#### **WORK EXPERIENCE**

Data Analyst at Daten Solutions Inc., Chicago:

(May 2020 - Present)

- Developed and automated data migration pipeline from SQL Server to Snowflake using SnowSQL and SnowPipe, and performed dimensional modeling on the migrated data, further created data dictionary for the technical audience.
- Automated ETL processes using Prefect (Python), making it easier to wrangle data sets 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.
- Created PowerBI dashboards using the DAX function to explain variation in success Metrics and Time Series Analysis to higher management.
- Automated reporting process using Excel VBA (Macros) and MySQL maintaining accuracy and saving ~ 75% of time, maintained version control Git, Mercurial, SVN.
- Created interactive dashboards and report with R Shiny and R markdown, which helped the upper management to perform Root Cause Analysis.
- Performed benchmarking of federated queries in **Apache Spark** and compared their performance by running the same queries on **Presto**.

## Data Analyst - Practicum Student at Labelmaster, Chicago:

(Aug 2020 - Dec 2020)

- Involved in designing databases, data marts, E-R model for OLTP and multi-dimensional model for OLAP using SnowSQL.
- Optimized complex SQL scripts for quality checking of projects and populating output tables for deployment using Azure
   Pipelines.
- Automated hourly status report saving 10 man-hours/week, thus decreasing response time for fixes and campaign failures.
- Achieved an accuracy of MAPE 8% approx. on price forecasting using Deep Learning algorithms like LSTM and RNN, further
  created dashboards for presenting the forecasted values to the higher management.
- Implemented quality testing techniques leading to a 5% reduction in software development project cost.

### Data Analyst at Cartesian Consulting:

(Apr 2018- Jul 2019)

- Developed pipelines for ETL using Snowflake, Python, Azure DevOps and AWS S3 for acquiring a POC project.
- Extracted data from streaming pipelines using Flume and Kafka and processed using Spark Structured Streaming.
- Predicted sales by **time series forecasting** in **Python** using **neural networks**, **ARIMAX** and **Prophet** for inventory management by eliminating understocking and reducing overstocking by 56%.
- Applied K-means clustering in Python for segmentation of customers, comparing it with RFM (Recency, Frequency and Monetary Value) analysis for improved campaign targeting.
- Developed **dimensional data models** and **data warehouse** adhering to integrity and **normalization** rules to support campaign **data mart** and customer one view for marketing campaigns. Wrote **complex SQL** queries (multiple joins, CTE's, subqueries).
- Generated visualizations using **PowerBI** to analyze marketing **metrics** for making recommendations and supply chain analysis.
- Suggested new workflow processes to improve the SDLC process and increased testing turnaround by 15%.

## Data Analyst Intern at Greeksoft Technologies Pvt. Ltd.:

(Sept 2017 - Dec 2017)

- Identified probable customer churn using Classification Models in Python like Decision Trees and achieved a recall of 84%.
- 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 where outputs supplemented Bull Spread Strategy in Options Trading with an accuracy of 71%.

## Data Analyst at Tata Capital Financial Services Ltd.:

(Jul 2015- Jul 2016)

- Built **KPIs** and **Regression** models to predict **customer life-time value**, enhance propensity and scoring attributes.
- Accurately extracted insights and created dashboards using PowerBI, Excel VBA (Macros), pivot tables and slicers.
- Formulated ad-hoc reports based on requirements gathered from various stake holders using **JIRA** to provide solutions.
- Created automated reports, graphs, dashboards, and data visualization using business **objects**, **tableau** and **python**.

#### **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 GCP's big query data warehouse by leveraging big data technologies such as Apache Hive, Apache Pig, HDFS and Apache Spark (git link)

#### Recommendation System using Yelp (Language/Tools- Python, Jupyter Notebook:

• 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** with an **AUC** of 0.81 (git link)

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

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