## **RAKESH CHOUDHURY**

#### **EDUCATION**

## Northeastern University,

Master of Science in Information Systems Expected: May 2021

#### Kalinga Institute of Industrial Technology,

Bachelor of Technology, Electronics and Telecommunication

May 2011-May 2015

#### **WORK EXPERIENCE**

## Serole Technologies, India- Data Analyst

February 2018-July 2019

- Built classification models leveraging random forest risk model with 0.81 F1 score to segregate customers on their likelihood to payback for the Insurance product.
- Developed **ETL** data pipelines running **SQL stored procedure** pulling 100 GB data into target data marts for quantitative analysis following audit procedure.
- Led team in improving database and Query performance by nearly 50% using **SQL indexing technique**.
- Delivered Tableau report from 1000+ parameters of customer and finance data to executive team to improve customer acquisition and retention, increased sales pipeline.

## Accenture, India- Data Analyst

June 2015-January 2018

- Initiated SQL Query automation script using python for replication to target 500+ data mart.
- Led team to design **star schema** dimension model decreasing Query time by 50% adhering to business KPIs.
- Designed paralleled daily ETL night jobs with slowly changing dimension(SCD) type 2 technique pushing to data warehouse tables at 9x speed for business analysis on PowerBI.
- Conducted **scrum** activities for team of 3 in **jira** environment, updating sprint backlog, and handling bugs and tasks.
- Won ace award for helping client save \$160,000 per year for its highest paying customer.

#### **TECHNICAL SKILLS**

**Programming skills:** SQL, R, Python, Java, CSS, JavaScript

Libraries: Numpy, Pandas, Tensorflow, Pytorch, Matplotlib, Plotly(DASH)

**Version Control:** GitHub, Git, Bitbucket, LINUX(Bash)

Data Visualization tools: Tableau, Power BI, Salesforce (Einstein Analytics), Flourish

Cloud: AWS (EC2, S3, RDS, Redshift), Heroku

Tools: Jira, Microsoft office suite, G-suite, Alteryx (ETL), Talend (ETL), Snowflake

Database: SQL Server, Mongo DB, SAP HANA, PostgreSQL, MySQL, Oracle

**Framework:** Django, Flask, Streamlit

**Certifications:** Google Analytics for Beginners[Link], Advanced Google Analytics[Link]

#### **ACADEMIC PROJECTS**

# IMDB Data Warehousing Project:(Amazon S3, PowerBI, Data Model, Alteryx, Dimensional model, BigQuery)

- Brewed Talend ETL jobs performing data cleaning with regex and data type conversions operations while loading 20 GB of flat file data into an Oracle Data Warehouse.
- Optimised all jobs ingesting data into Oracle database tables from data stored in AWS redshift saving up to 3 GB of memory.
- Loaded data into PowerBI with interactive dashboard for 100+ attributes, measures and calculations resulting visualization
  of data and findings.

#### Airport Database Management System: (Tableau, RDBMS, Business Intelligence, AWS RDS, MSSQL, Talend)

- Plumbed Talend data pipeline to load dimensional model data into SQL server from Amazon RDS with reduction in memory consumption by 1.5 GB.
- Manipulated 4 GB of data using SQL joins, functions, triggers, procedures, error handling and pivot table.
- Integrated data using SQL views as different data marts to be consumed into Tableau dashboard with 15+ parameters to generate insights on Airport operations

# Recommendation system A/B testing:(Machine Learning, Python, Heroku, Streamlit, Numpy, Pandas, Seaborn, Matplotlib)

- Utilized Tensorflow RBM (Restricted Boltzmann Machine) machine learning model in python for training neural networks
  feeding product ratings, historical behavior, Retail Channel as key parameters achieving an accuracy of 79.2% in
  predicting 1-5 star ratings.
- Productionised machine learning application leveraging streamlit on Heroku for a recommendation system; placing
  products chronologically that engages users and helps in shooting sales upto 250%.
- Operated on a large scale recommendation system to improve market strategy, customer experience, and revenue bump by 30%.

## Brand Promotion on YouTube Channels:(NLP, Logistic regression, k-means, Amazon EC2, Flask, Statistical Methods)

- Handled 4 GB dataset with python classifying YouTube Channels with popularity score on likes, dislikes, views via scikit learn's k-means and logistic regression model.
- Computed trend metric with popularity classification points and NLP's sentiment scores resulting in 225% return on investment as part of brand influencing.
- Integrated python code on Flask web application and deployed on AWS EC2 instance.