## RAKESH CHOUDHURY

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#### SUMMARY

Experienced Data Engineer delivering solutions in scrum-based agile environments, helping clients develop analytical reports with dashboards for business analysis. I am a data pirate who loves hunting for the most valuable data to bring out some great insights with visualizations.

### **EDUCATION**

### Northeastern University,

Master of Science in Information Systems

Expected: May 2021

Courses: Data Science Management Tools, Application Engineering Development, Program Structure Algorithm, Algorithmic Digital Marketing, Data Management Database Design, Designing Data Architecture Business Intelligence

# Kalinga Institute of Industrial Technology,

Bachelor of Technology, Electronics and Telecommunication

May 2011-May 2015

### **WORK EXPERIENCE**

### Serole Technologies, India- Data Engineer

February 2018-July 2019

- Massaged data using SQL reporting with classification of user's/customer's eligibility for insurance
- Mined risk management data for quantitative analysis to determine company's loss or gain based on product damage, lifespan, and other parameters of products
- Trained new team about project's technical and business aspects to help scale deployments and process reports

## Accenture, India- Data Engineer

June 2015-January 2018

- Conducted scrum activities for team of 3 in assigning and updating tasks and stories in jira environment
- Initiated automation project collaborating with team members where SQL script was generated using python for 70+ systems for a change request. This helped client save approximately \$160,000 per year for 20 change requests
- Developed stored procedures to build data pipelines for ELT processes to ingest transactional data into data lake tables
- Analyzed client's business requirement and made SQL views report using statistical methodologies to track post production support ticketing system performance
- Envisioned the data on PowerBI dashboard stories with KPIs that depicts department that need improvement
- Led team in solving complicated database performance issue adhering to business best practices
- Won ace award for innovative database performance optimization

## **TECHNICAL SKILLS**

Programming skills: SQL, R, Python (Numpy, Pandas, Tensorflow, Pytorch), Java, Bash, CSS, JavaScript

Operating Systems: Mac OS, Linux, Windows Version Control: GitHub, Git, Bitbucket

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

Cloud: Heroku, AWS (EC2, S3), HPC(High Performance Computing) cluster

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

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**

## Recommendation system A/B testing project: [Project Link]

September 2020-January 2021

- Utilized Tensorflow RBM (Restricted Boltzmann Machine) machine learning model in python for training neural networks feeding product ratings as key parameter achieving an accuracy of 79.2%
- 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%

## Brand Promotion on YouTube Channels: [Project Link]

May 2020-August 2020

- Classified YouTube Channels based on popularity, likes, dislikes, views via scikit learn's k-means and logistic regression model
- Computed trend metric extracting parameters from arima time series forecasting and NLP's sentiment scores
- Incorporated above parameters to formulate return on investment resulting up to 225% on certain channels
- Integrated python code on Flask web application and deployed it on AWS EC2 cloud

# Airport Database Management System: [Project Link]

January 2020-April 2020

- Fed data to SQL server database from flat file anchoring ETL pipelining tool Alteryx by following star schema data models
- Assembled functions, triggers, procedures and error handling to maintain data integrity and consistency in relational SQL server database
- Leveraged **pivot table** functionality to create clear readable reports on tabular output
- Worked on statistical analysis of customer centric data on Tableau dashboards and plotted flight routes on map to check the busyness of airport

# IMDB Data Warehousing Project:

September 2019-December 2019

- Brewed **Talend** ETL jobs performing different regex and data type conversions operations while loading flat file
- Configured connections in Talend to load data to staging tables in target PostgreSQL database
- Parallelized all jobs in master job to optimize performance while feeding 15 GB data into PostgreSQL database tables
- Reconfigured tables into dimensional model designed in ER Studio, enhancing the query runtime by roughly -50%
- Loaded data into PowerBI with interactive dashboard for different attributes, measures and calculations resulting visualization of data and findings