SOURAV ROY

EDUCATION

M.S. Business Analytics

University of California, San Diego 08/2021 - 06/2022

B.Tech Electrical Engineering

National Institute of Technology, Durgapur

07/2012 - 06/2016

TECH STACK

Programming Languages

SQL · Python · R

Data Visualization

Tableau · Looker

ML/Statistical Modelling

Regression · Classification · Clustering ·

Neural Networks · NLP

Other Tools

Tensorflow · Hadoop · Spark ·

Google BigQuery · Microsoft Azure · AWS ·

Snowflake · GIT · Jira · Amplitude · Figma ·

Optimizely

ACADEMIC PROJECTS

Gamification for Masterclass App

Identified an opportunity to increase user engagement and user retention by introducing gamification to Masterclass courses.

- Used Figma for feature design.
- Prototype was utilized for user testing.
- The age bracket of 18-30 responded positively to the gamification concept, expressing interest in further engagement with the app.

Intuit Quickbooks targeted campaign

Intuit wanted their Quickbook users to upgrade to the latest version. They had initially sent out emails to all users. Based on the first waves response a targeted campaign was designed for second wave.

- An ensemble model of Neural Network, Logistic Regression, and XGBoost was the best predictor.
- The predicted model outputs would have fetched a profit of \$449,816.

LANGUAGES

English	Native
Hindi	Native

SUMMARY

A **results-oriented** and **business-focused** professional with over 6 years of extensive experience in **Product Analytics**, **Customer Analytics**, and **Machine Learning**, demonstrating a successful history of effectively **translating stakeholder needs into concrete deliverables**. A **proactive learner** who constantly seeks to expand knowledge and expertise. Firmly believes in the power of **data-driven strategies** to enhance and simplify our daily lives.

EXPERIENCE

Staff Analyst

07/2022 - Present

EXL Services

New York City, USA

- Collaborated with cross-functional teams to improve data connectedness across product lifecycle stages for a leading US bank, reducing yearly data sourcing costs from 20+ systems by 11%, with future savings projected to exceed 20%.
- Revamped fraud detection models using PySpark for Zelle and new account openings by introducing 15+ innovative features, resulting in a substantial reduction of over 20% in false positive cases.
- Built data quality pipelines using PySpark to monitor and enhance reliability of data input into fraud detection models for various banking products, resulting in a 12% improvement in data accuracy and 8% reduction in data-related errors.
- Optimized Python and R scripts critical to the fraud monitoring team, significantly improving efficiency and performance, resulting in over 20% reduction in processing time and significant reduction in data spill in Impala.

Senior Analyst

11/2020 - 07/2021

Gurgaon, India

EXL Services

- Developed customer segmentation in PySpark by analyzing performance across various sales channels, resulting in ~17% increase in sales leads and a boost in market share.
- Engineered and implemented a topic modeling initiative using Latent Dirichlet Allocation (LDA) in Python to extract meaningful insights from unstructured data, optimizing customer feedback categorization and reducing manual labor by over 90%.
- Identified bottlenecks in the customer journey through support channels and suggested solutions, resulting in a 45% boost in CSAT scores and a 34% reduction in customer care call time, enhancing overall customer experience and efficiency.

Senior Analyst

04/2018 - 11/2020 Bengaluru India

Kantar

- Identified gaps in user experience on both the website and app for an entertainment company, formulated hypotheses, and executed A/B tests, resulting in a 13% surge in free trial to paid conversions and an 9% improvement in subscriber retention.
- Deployed a recommendation engine in TensorFlow using latent matrix factorization and hybrid content-collaborative filtering to address the cold start problem, resulting in ~7% boost in click-through rates and ~12% increase in overall user engagement.
- Assisted in the successful launch of an anime movie with minimal advertising by using geospatial analysis and engagement data, resulting in 3rd highest gross collection till date.
- Built a machine learning model to predict the likelihood of a customer making a repeat purchase on the website of the largest US luxury jewelry brand, with targeted ads it resulted in a 20% increase in repeat purchases.

Business Analyst

06/2016 - 04/2018

Bengaluru, India

Kantar

Designed and implemented A/B tests to evaluate the effectiveness of various marketing email designs for cross-selling, resulting in ~7% revenue boost.

- Analyzed the customer journey through funnel analysis to identify major areas of dropout and provided data-driven recommendations, resulting in over 3% drop in churn rate.
- Developed supervised models like Customer Lifetime Value and churn prediction, as well as unsupervised models such as customer segmentation, to aid stakeholders in decision-
- Created various dashboards with key performance indicators (KPI's) to provide stakeholders with insights into product health that enhanced decision-making accuracy.

AWARDS

People Manager Award (2023)

Effective collaboration with cross-functional teams, surpassing expectations in first phase delivery of product.

Sirius Award(2019)

Successfully delivered a series of complex projects leading to contract renewal and an increase in contract value with client.