

Tarun Singh

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EDUCATION

UNIVERSITY OF MINNESOTA, Minneapolis, MN

Carlson School of Management

Master of Science in Business Analytics (GPA: 3.9 | Carlson Scholar)

05/2019

THAPAR UNIVERSITY, Patiala, India

Thapar Institute of Engineering and Technology

Bachelor of Engineering – Electronics and Communication

06/2012

EXPERIENCE

TARGET, Minneapolis, MN, USA

Senior Data Scientist – Data Sciences and Analytics

07/2019 - Present

- Implemented a guest's propensity score model to calculate the guest's affinity for enrolling in REDcard (Target's financial product), reducing the REDcard guests' acquisition cost by ~40% compared to other audience selection methods
- Developed and productionized an NLP classification model based on product reviews using Tensorflow & Universal Sentence Encoder to identify the Safety/Injury cases, adding 15MM incremental dollars annually and helping agents with tag recommendation
- Led quarterly runs to measure the causal impact of Target programs on sales incrementality and guest engagement via statistical quasi-experimentation methods such as Propensity Matching/Synthetic Control, helping them measure the impact of their actions
- Driving Target Circle churn project - defining business problem, identifying right metrics, model building, and designing testing and measurement plan to identify disengaging audience and prevent churn, improving guest's retention and engagement with Circle
- Collaborating with engineers, business teams, and product owners for requirement gathering, defining business problem, choosing right metrics, building right analytical solution, and communicating the end outcomes and help them adopt the new solutions

JUNGLEE GAMES, New Delhi, India

Assistant Manager – Analytics and Data Science

08/2017 – 05/2018

- Designed analytics process and set up analytics infrastructure for daily tasks - defining SLAs, building reporting infrastructure and helping the business team with self-service analytics
- Implemented a prediction model using Balanced Random Forest and Scikit library with 98% accuracy, to predict high revenue generating players early in lifecycle for better targeting and churn prevention
- Improved marketing process via customer segmentation based on RFM score and Clustering, resulting in 9% increase in retention and 12% cost reduction

HEALTHKART, New Delhi, India

Assistant Manager – Analytics and Business Intelligence

04/2016 – 08/2017

- Led team of 5 analysts for an e-commerce firm and worked with marketing and product teams to drive business success
- Designed product recommendation and customer profiling system by analyzing Clickstream data with more than 1 million records using Markov Chain model for better customer experience
- Built a predictive model to reduce company's order return rate from 12% to 8% using Random Forest model on historical transactional data for more than 1 million records using Pyspark

Senior Business Analyst

04/2015 – 03/2016

- Developed data warehouse system and data marts using ETL tools for Sales, Inventory and marketing processes
- Managed reporting infrastructure and integrated Qlik to help stakeholders with self-service analytics

ZS ASSOCIATES, New Delhi, India

Business Technology Analyst

05/2013 – 04/2015

- Created data warehouse system for monthly Incentive compensation of 7000 sales reps for Fortune 500 pharma companies
- First runner up in ZS Hackathon, for using Neural networks to identify best communication channel to target a prescriber

PROJECTS & PRO BONO

CORRELATION ONE, Data Science Mentor

- Worked as Data Science mentor for DS4 all empowerment program, helping Black, Latinx, LGBTQ+, and other underrepresented groups with data science projects, Python training, job search process and interview practice

CARLSON ANALYTICS LAB, Analytics Student Consultant

- Built Discrete Choice model to measure the price elasticity and cross price elasticity to strategize better for the price changes and assess impact of pricing decisions for a leading US car rental business
- Predicted daily hotel occupancy for a leading hospitality and entertainment business based on historical demand, weather conditions and marketing promotions, using LSTM models, resulting in improved revenue by 15% and enhanced customers experience

SKILLS

- **Tools:** R, Python, Spark, Excel, SQL, Tensorflow, Jupyter Notebooks, Google Analytics, Tableau, AWS, Hive, Pig
- **Algorithms & Techniques:** Regression, Classification, Clustering, Neural Networks, Machine Learning, Data Engineering, Predictive Modeling, Forecasting, A/B Testing, Natural Language Processing, Quasi-Experimentation