ALOK KUMAR

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EDUCATION

UNIVERSITY OF MINNESOTA, Carlson School of Management, Minneapolis, MN
Master of Science in Business Analytics May 2020

- Relevant Coursework: Statistics, Programming (Python), Database Management & Warehousing, Predictive Analytics, Exploratory Analytics, Big Data, Econometrics and Experimentation, Time Series Analysis, and Agile Management

VIT UNIVERSITY, Vellore, India
Bachelor of Technology in Electronics and Communications Engineering June 2015

EXPERIENCE

HANSA CEQUITY, Mumbai, India
Senior Analyst- Analytics December 2015 – March 2019

Marketing analytics for a Telecom firm

- Revamped an existing customer churn prediction model by efficiently collecting data and using Random Forest reducing churn rate by 7% with R and SQL
- Deployed cross-sell strategy using predictive models to target 4 segments of customers, generating additional revenue of $86K
- Developed revenue framework for planning yearly marketing strategy of the company's premium subscription service using polynomial regression with 5% error margin
- Analyzed price change effect on subscriptions using Difference in Differences method and performed a cost-benefit analysis to attribute the impact
- Identified the opportunity to tag sports enthusiast subscribers for event-based offers and customized products resulting in additional revenue of $25K and longer engagement with the company
- Revamped multiple existing predictive models with logistic regression using R and SQL, enabling better prioritization, leading to an average lift of 2.5 in sales conversion

Data analytics for Electronics retail company

- Led a team of two to build a data warehouse supporting all analytics needs, which standardized data reporting and saved 50% of the runtime
- Identified high potential targets for marketing campaigns to cross-sell electronic products with Random forest and XGBoost giving sales conversion a lift of 3 using Python and SQL

Business Intelligence for Automobile firm

- Analyzed effectiveness of campaigns using Propensity Score Matching technique which initiated client engagements for new campaigns resulting in additional revenue
- Designed a business tracking suite comprising detailed campaigns, inquiry, and sales performance, helping in tracking business performance and anomalies in data using Tableau and SQL

ACADEMIC PROJECTS

- **Time Series** *(for a commodity price reporting agency)*- Forecasted soybean oil futures price by using public data with multivariate ARIMA, Random forest and XGBoost reducing MAPE from 2.7% to 1.2%
- **Mall of America case competition** *(finalists*)- Analyzed 3 years of customer call patterns and incident situations using SQL and presented recommendations using Tableau to aid Mall of America plan their staffing
- **A/B testing**- Estimated impact of online banner ads on sales of a video service provider using a randomized controlled experiment with Logistic regression
- **Causal Inference**- Established causal impact of increasing number of calls on product subscription of a banking institution using propensity score matching technique with Logistic regression
- **ML Pipeline**- Developed a machine learning pipeline using Spark MLlib on Databricks to recognize handwritten digits with 96% accuracy using Random Forest
- **Time Series**- Forecasted daily temperature of Minneapolis for 2 years using last 8 years of public data and compared results obtained using ARIMA, Random Forest and LSTM
- **Customer Revenue Prediction:** Predicted customer purchasing probability with 95% and future revenue spend by analyzing web activity on google store using stacking of Random forest, SVM and XG Boost

SKILLS

- **Tools:** SQL, Python, R, Tableau, Apache Spark, Power BI, Hive, MS Excel, Jira
- **Techniques:** Predictive modeling, Statistical analysis, Exploratory analysis, Time Series, Root-cause analysis, A/B Testing, Data visualization