Jaspreet Singh

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TECHNICAL SKILLS

Big Data Platforms: Apache Hive, Hadoop and Machine Learning algorithms (Intermediate), Heroku, Git	**Reporting:** Data/Business/System Analysis, Power BI, Tableau, Excel and Streamlit
APIs: Functional knowledge of Rest APIs **Web Scraper:** Beautiful soup and Selenium	**Database Queries:** MS SQL Server Management Studio and Oracle SQL Developer
Languages: T-SQL, DAX, MYSQL, Python (Intermediate) **Python Libraries**: Pandas, NumPy, Matplotlib, Seaborn, Scikit-learn, Json, Request, BeautifulSoup and flask.	**Regression (**Linear, Lasso, Ridge, Random Forecast**), Classification (**K-NN, Random Forest**), Clustering (**K-Means, Hierarchical**), Forecasting (**ARIMA, SARIMA**),** Data Cleaning & Interpretation

EXPERIENCE

Data Analyst | Yell Limited | August 2018 - Present

Working within a team of 7 as part of the Insight and Reporting Team, with a focus on analysing the internal company data to achieve improved business performance, reporting to the Insight Manager.

Key Responsibilities

- Analysing the data to answer the key business questions that will shape our strategy and empower us to deliver against our company scorecard.
- Supporting the pricing strategy and monetisation of Yell.com.
- Presenting analytical conclusions with clarity and actionable insights.
- Building end to end dashboards in Power BI and automating reports.
- Liaising with other senior stakeholders and teams as required and presenting back findings when needed.
- Building ETL pipelines using REST API method inside python and populating the data into oracle database table. Further, setting up a scheduling job on Linux (crontab) to daily fetch the data.
- Forecasting the impact of Holiday payment customers had on the business by revenue and churn.

Key Achievements

- Reducing churn by 3.5% by developing Product Quality performance indicators to monitor on a regular basis inside Power BI.
- Increasing lead conversion rate by 4% for online registration channel by building customer segmentation on 2.7 million businesses based on their business profile and loading the data onto Eloqua (Oracle Marketing Platform) using post Rest API.

Junior Business Analyst | Virgin Experience Days | Jan 2017 - Aug 2018

Working within a strong commercial department to produce regular and ad-hoc reports. Using various data sources, including Google Analytics and Hitwise, to answer business questions.

Key Responsibilities

- Using a range of business tools to produce regular and ad-hoc reports, dashboards, charts and stats for internal stakeholders and external suppliers
- Using a range of data sources, queries and analytical techniques to provide the appropriate information to answer business questions
- Producing a weekly update of competitor activity to be shared with several teams across the business
- Been involved with the production of new business reporting and processing tools

Key Achievements

- Building profiles for customers to be targeted for existing and upcoming experiences resulted in a 17% increase in sales.

Maths Tutor | Tutor Doctor | April 2018 – August 2019

Working with GCSE and A-level Maths students to support them in developing their knowledge, skills, and confidence in preparation for their exams. To support the students, I prepared tutorials, worksheets, and exam questions. It was important to be patient with students and trying to understand their learning methods, which then allow me to ensure that each student reaches their maximal potential. At the end of each session, I send a written progress report to parents.

EDUCATION

Reading University | 2013 - 2016

BSc Mathematics and Statistics [First Class Honour]

Relevant modules included, but were not limited to: Medical Statistics, Sampling Methods, Advanced Statistical Modeling and Applied Graph Theory.

Personal Projects

Car Price Estimator: Data Science Project Overview

Scraped over 8,000 car listings from Autotrader using python and beautiful soup. Performed exploratory data analysis and predicting car prices to help car owners/buyers to negotiate the deal using Lasso, Decision Tree and Random Forest Regression. The highest accuracy was MAE ~ £1539 car price by using Random Forest Regression with the help of GridsearchCV. I also built a dashboard on Tableau Public for users to interact with useful information before purchasing a car.

London Borough Crime: Forecasting Project Overview

Using crime stats from the Metropolitan police site to perform exploratory data analysis and forecast the crime rate in the next 12 months using the ARIMA model. The highest accuracy of MAE ~3,500 crimes by using ARIMA. I also built a dashboard on Streamlit using a flask web frame and deployed the dashboard on Heroku.

Kickstarter Success Rate: Data Science Project Overview

Using a data set of close to 300k Kickstarter projects, I performed exploratory data analysis and predicted the success rate of the Kickstarter funded projects to help an entrepreneur achieve a successful campaign by optimised Logistic regression, Decision Tree, and Random Forest Classification. The highest accuracy score of 85% by using Random Forest Classification and hypertuning with GridsearchCV to reach the best model.

Liverpool's Title Run in 30 Years: Cluster Analysis Project Overview

Using the data set for the last 10 years to compare Liverpool's performance with transfer spending each season, to find out whether spending more money on transfers is the reason behind Liverpool's recent success?

I optimised K-Means and Hierarchical clustering methods to reach the conclusion of the analysis. There is evidence to suggest more spending leads to fewer matches been lost but there is no concrete evidence to suggest more spending leads to winning more matches. I also built a dashboard on Streamlit using flask web a frame and deployed the dashboard on Heroku.

Yelp Restaurants Reviews: Data Analysis Project

Extracting the data from Yelp API to gather all the restaurants listing across London (within a radius of 25km) using the Rest API method in python. After extracting the data, I needed to clean so that it was usable for exploratory data analysis on 10k+ Restaurants listings and finding the popular restaurants by reviews and ratings. I also built a dashboard on Tableau Public for users to interact with useful information before going out to eat.