

SKILLS: Python (1 year 6 months), SQL (1 year 3 months), R (4 months), Tableau (3 months)

WORK EXPERIENCE

Tech Mahindra Business Services, Mumbai, India

Analyst

May 2019 – Present

- Implementing Machine Learning models and using them for various ongoing projects.
- End to end project management, communicating with the stakeholders, understanding the business requirements and delivering projects accordingly.
- Taking suggestions from stakeholders for improving and making the models better.
- Automating various manual processes with the help of Python.
- Making decks and dashboards for better visualization of the data, thus making derivation of insights easier.
- Leading a team, for scraping data from the web and building an internal webpage for improving the advisor efficiency.

Management Trainee

Jan 2019 – Apr 2019

- Worked on building a classification model – Bernoulli Naïve Bayes for predicting the contact reason of the customer which helped the Advisor in resolving the customer's queries efficiently thus making the customer experience better.
- Built dashboards using D3.js for showcasing the key contact center KPIs in an interactive manner.

Edwise International LLP, Mumbai, India

Faculty

May 2017 – Jun 2018

- Taught quantitative analysis to students appearing for international standardized tests like GRE, GMAT and SAT in group settings.
- Trained newly recruited faculty members for different branches.

EDUCATION

S.P. Jain School of Global Management, Mumbai, India

Jun 2018 – Dec 2018

Professional Certificate Program in Big Data and Visual Analytics.

Watumull Institute of Electronics Engineering and Computer Technology, Mumbai University, Mumbai, India

Class of 2016

B.E. Electronics and Telecommunication.

PROJECTS

Current Project: Social Media Analytics, Python (Pyquery & Textblob) / Analyst, Tech Mahindra Business Services

- This project includes scrapping customer's reviews about the client's services from websites like Twitter and Trustpilot and further doing the sentiment analysis for the same.

Current Project: Speech Analytics, Python (SpeechRecognition) / Analyst, Tech Mahindra Business Services

- The aim of this project is to transcribe the speech of the advisor and the customer into text and then further do the speaker diarization for the same.

Next Best Action, Python (NLTK, Naïve Bayes & ANN-Keras) / Analyst, Tech Mahindra Business Services

- The aim of this project was to assist the advisor by providing a chat bot like helper on screen which will suggest an action to be taken by him when he gets a new chat.
This was especially build for new joiners so that their learning life cycle is reduced and do not require much support from their team leader while at the same time improving their efficiency.
- The data considered in this project was text data as the advisor chat data was considered.
This required intensive use of NLP techniques in python for data cleaning and pre-processing.
The chat data thus gathered had to be cleaned and had to be categorised so that the further steps to be taken by the advisor could be linked and could form a process chain.
- For data cleaning Python's 'NLTK' package was used while at the same time I had to write some codes for auto correcting the incorrect words.
A dictionary of the technical and other useful words was made and then a Document Term Matrix was created with the help of that.
- This was a typical text classification problem as the chats had to be categorised into different contact reasons of the customers.
- For this classification I used Bernoulli's Naive Bayes' algorithm (51% accuracy) and also tried making the accuracy better with Artificial Neural Networks using Keras (55% accuracy).
- This accuracy further improved to ~86% (extrapolated result) when the incorrect prediction data was shared with the Monitoring and Quality Control Team and they random audited 10% of the data after which they found the advisor tagging was incorrect for the given chat.
- The model was then shared with the web development team (lead by me for the given project) and was deployed on the front end which helped in predicting the purpose of the customer chatting, based on the initial question of the customer itself. Which then helped them in linking the predicted reason to the further steps that the advisor had to take for handling the chat.

UK Mobile Market, Python (Selenium) / Analyst, Tech Mahindra Business Services

- The aim of this project was to scrape the data like the tariff plans of phones as well as SIM, promos, offers of the different telecommunication service providers as well as the retailers in the UK. This helped in better analysing the offers of the competitors and thus in providing insights as to what better deals the client can offer to the customers.
- This also benefited the advisors as their average call handling time was reduced thus making it possible for them to serve more customers in comparatively less time without compromising on the accuracy of the information provided.
- This scraping was implemented using Python's 'Selenium' package.
The data thus scraped was uploaded to the SQL database using Python.
- The data was later shared with the web development team (lead by me for the given project) and a web page was created that could be easily accessed by the advisors as it was deployed on the internal organization network.

Customer Phone Bill(.pdf) Scraping, Python (regex) / Management Trainee, Tech Mahindra Business Services

- The aim of this project was to scrape the phone billing information (details like data usage, minutes and text usage and their specific billed amount) of the customer.
- This required extensive use of regular expressions for python.
- The .pdf file was first read in python and the various fields were scraped with the help of 'regex' as those were very unstructured files as each bill, the type of tariff the type of add-ons the customers use differs along with the way it is placed on the pdf.
- These different variables scraped were then exported to the SQL Server Database and stored in a table.
- This data was further showcased on a web page accessible to the advisors which helped save their time as they didn't eventually have to go through the .pdf files of the customers and look through it every time a customer called.

Loan Prediction, Python / Self, Analytics Vidhya

- Developed a Gradient Boosting Model for predicting the Loan Status and got an accuracy of 80.56% on the leaderboard with 166 rank.

LANGUAGES: English and Hindi.