Machine Learning & AI

- Good knowledge in understanding Machine Learning concepts and analytical skills.
- Building and analysing dashboards and reports.
- Comfortable with Python - pandas, NumPy, SciPy, matplotlib, OpenCV, TensorFlow
- Proficiency with a deep learning framework such as Tensor Flow or Kera's.
- Defining the pre-processing or feature engineering to be done on a given data set.
- Comfortable with data-visualization tools and techniques.
- Defining data augmentation pipelines
- Training models and tuning their hyper parameters
- Work with large, complex datasets. Solve difficult, non-routine analysis problems, applying advanced analytical methods as needed.
- Familiarity with software development life cycles and agile programming methodologies
- Strong understanding of Product Lifecycle and QA Processes/Methodologies

Good hands-on experience in using Machine Learning models like Supervised & Un-Supervised, building Chatbots, NLP, Neural Networks.

Technology/Tools/IDE: - Jupyter, Spyder, Visual Studio Code, Nimble box, TensorFlow, Kera's, Google Colab, Kaggle, Python, Rasa.

Worked on below Machine Learning Projects.

GitHub → https://github.com/Vishy007-geek/Machine_Learning

1) **Lending Case Study** - A lending company wants to understand the driving factors (or driver variables) behind loan default, i.e. the variables which are

strong indicators of default. The company can utilize this knowledge for its portfolio and risk assessment.

2) **Investment Funding** - The investment company wants to find the out best investment type & sector to invest within the budget range of 5 – 15 Million USD in top 3 countries.

3) **Car Price Prediction** - Find out the significant features in predicting the price of a car which can help the Car Manufacturing Company to manipulate the design of the cars, the business strategy etc. to meet certain price levels.

4) **Telecom Churn Prediction** - To reduce customer churn, telecom companies need to predict which customers are at high risk of churn i.e.; ordinary or HNI Customers. Also need to find out the various reasons/features for customer churn which can help telecom company to take necessary action to retain customers.

5) **POS Tagging Case Study** - Solve the problem of unknown words using at least two techniques. These techniques can use any of the approaches discussed in the class - lexicon, rule-based, probabilistic etc

6) **Rasa Chat Bot** - A restaurant search Chabot. The bot will be able to 'talk' to users in English, and will help them search for restaurants offering multiple cuisines, suiting different budgets, etc., in several cities.

7) **Neural Network Case Study** - Build a complete neural network using NumPy. Implement all the steps required to build a network - feedforward, loss computation, backpropagation, weight updates etc.

8) **Gesture Recognition** - Develop a cool feature in the smart-TV that can recognize five different gestures performed by the user which will help users control the TV without using a remote.

Thumbs up: Increase the volume

Thumbs down: Decrease the volume

Left swipe: 'Jump' backwards 10 seconds

Right swipe: 'Jump' forward 10 seconds

Stop: Pause the movie