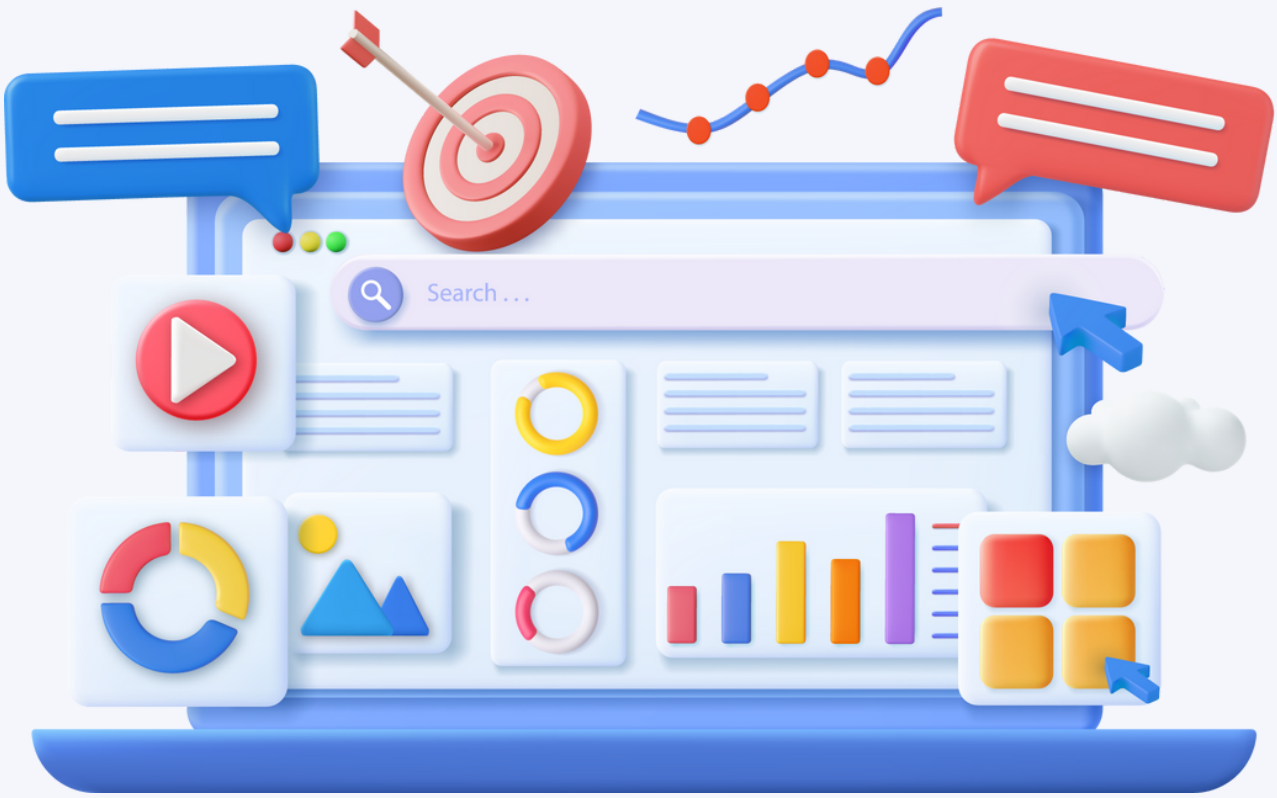
MERITSHOT

20 Projects

for Data Science Portfolio



Solve Real-world Projects with defined Objectives.
Derive Useful Business Insights.

Project #1

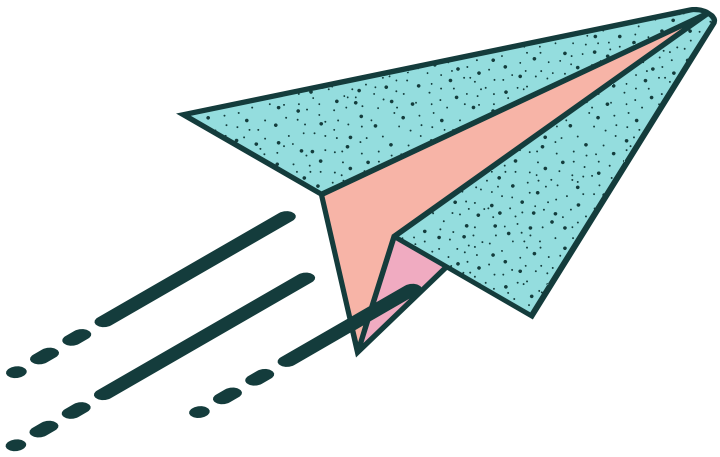
Startups Case Study

Problem Statement:
Analyze the Indian Startups, and Understand the Startup Ecosystems in India to answer some Interesting Questions. Try to find out the Major Investors and Startups.

Business Outcome:

- Explore the driving force behind Start-ups.
- Insights about the Investors and Top Startups.
- Financial Analysis

Industry/Domain: BFSI
Level: Beginner



Project #2

Players Performance Reviewer

Problem Statement:
Analyze the performance metrics of players based on their ground positions, skills, nationality, clubs, age, height, weight, and understanding the major factors driving the performance of these players.

Business Outcome:

- Recommendation of Players based on Football Positions.
- Grouping of Players based on their Mental and Physical Strengths
- Sort Players and clubs based on multiple metrics for comparative analysis.

Industry/Domain: Sports
Level: Intermediate

Project #3

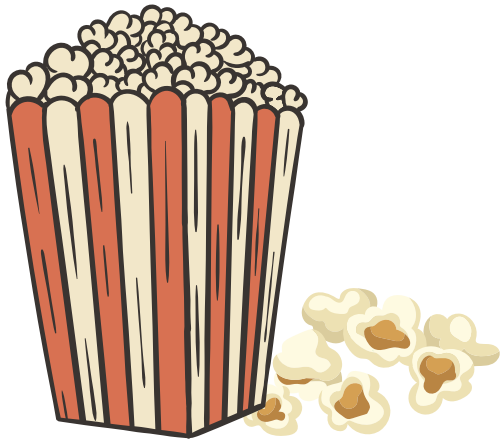
Movie Recommender Engine

Problem Statement:
Build a Recommendation Engine that could take in some values such as Choice of Actors, Genres, and Return the Best Movies to Watch to improve the user engagement and customer relationships.

Business Outcome:

- User Personalization.
- App stickiness and more Content Consumption.
- Better User Relationship

Industry/Domain: Ecommerce
Level: Intermediate



Project #4

Global Cost of Living Analysis

Problem Statement:
Answering the most common questions regarding living standards in different countries and understanding the reason behind it. Finding Insights about various types of lifestyles and luxuries around the world.

Business Outcome:

- Answer some interesting questions
- Exploratory Data Analysis
- People can make choices wisely for their trips, education etc.

Industry/Domain: Geo Spatial
Level: Advanced

Project #5

Open Jobs Analyzer and Recommendation System

Problem Statement:
Clean and process the data and analyze the trends and patterns to understand which kind of jobs and industries are growing and search jobs based on experience, education, skills, and industries.

Business Outcome:

- Recommend Jobs based on Locations, Job Title, Industry, Job Roles, Education, Experience, etc.
- Analyze the Job Descriptions based on Job Roles and Titles.
- Predict the Quality of a Job Role based on defined Metrics

Industry/Domain: IT/Software
Level: Advanced

Project #6

Employee Promotion Prediction

Problem Statement:
Take the details of an employee of Organization such as Age, Training Score, Region, Department, Awards, KPIs, etc and Predict whether the employee deserves Promotion.

Business Outcome:

- Able to manage the Human Resources.
- Better Employee and Promotions Management.
- Lesser Employee Churn Rate

Industry/Domain: Human Resources
Level: Advanced

Project #7

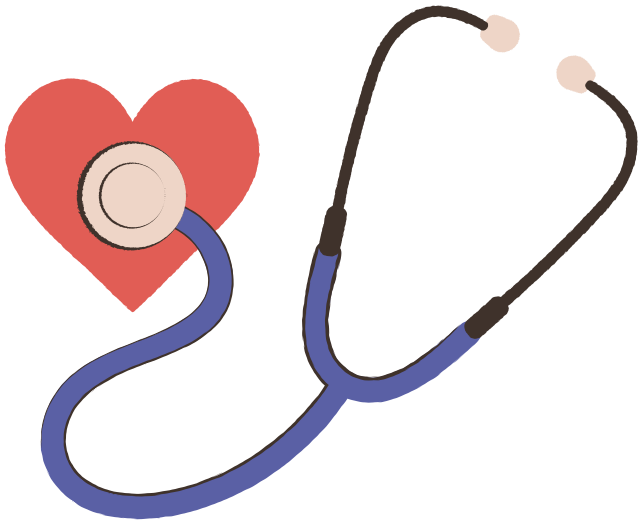
Predicting the Future Medical Expenses

Problem Statement:
Understand the medical expenditure on various factors such as age, weights , smoking behaviors and lifestyle. Understand the major factors responsible in Increasing Medical Expenses, and Suggest Corrective Measures.

Business Outcome:

- This project can be used as standalone by Health apps or devices for their consumers who can track and quantify their lifestyle and benchmark towards a healthier lifestyle.
- This project can increase the app or product usage of the company if this model is distributed along with their main app.

Industry/Domain: Healthcare
Level: Intermediate



Project #8

IPL Data Analysis

Problem Statement:
Understand the medical expenditure on various factors such as age, weights , smoking behaviors and lifestyle. Understand the major factors responsible in Increasing Medical Expenses, and Suggest Corrective Measures.

Business Outcome:

- This project can be used as standalone by Health apps or devices for their consumers who can track and quantify their lifestyle and benchmark towards a healthier lifestyle.
- This project can increase the app or product usage of the company if this model is distributed along with their main app.

Industry/Domain: Sports
Level: Intermediate

Project #9

Customer Lifetime Value Prediction

Problem Statement:
Customer lifetime value is one of the key stats likely to be tracked as part of a customer experience program. CLV is a measurement of how valuable a customer is to a company with for his lifetime as opposed to just the first purchase.

Business Outcome:

- Understanding Optimal Cost of Customer Acquisition
- Build Marketing Instrumentations including ROAS (Return Ad Spend)

Industry/Domain: Ecommerce
Level: Advanced

Project #10

Risk and Reward Ratio Calculator

Problem Statement:
The risk-return-ratio is a measure of return in terms of risk for a specific time period. The percentage return for the time period is measured in a straightforward way: where and simply refer to the price by the start and end of the time period

Business Outcome:

- Analyze Risks and Rewards.
- Risk Intelligence helps in better financial decisions.
- Leads to better Financial Decisions.

Industry/Domain: BFSI
Level: Advanced

Project #11

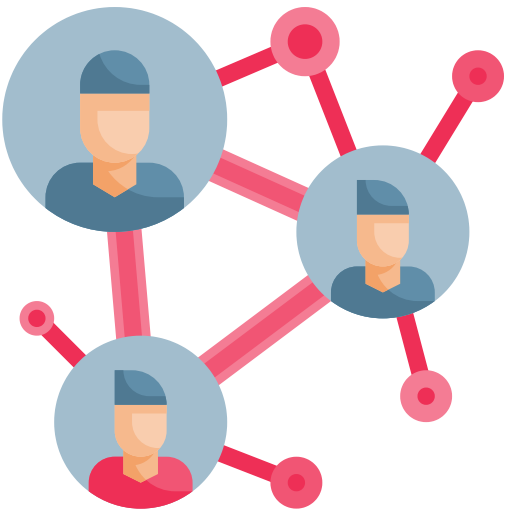
Customers Segmentation Engine

Problem Statement:
Divide the customer base into several groups of individuals that share a similarity in different ways that are relevant to marketing such as gender, age, interests, and miscellaneous spending habits.

Business Outcome:

- Customer segmentation enables a company to customize its relationships with the customers, as we do in our daily lives.
- When we perform customer segmentation, we find similar characteristics in each customer behaviors and needs. Then, those are generalized into groups to satisfy demands with various strategies.

Industry/Domain: Ecommerce
Level: Intermediate



Project #12

Facebook Ad Campaign Analysis

Problem Statement:
Compare different Marketing Campaigns to optimize the Leads Conversions and Sales Optimization. You will understand Complex Marketing KPIs used to understand Sales.

Business Outcome:

- Understanding these Marketing Campaigns will help the Organizations to Optimize their Ad Costs.
- These Marketing Campaigns can be used to Optimize the Sales Conversion if the Target Customer is correctly identified.
- Understanding the Major Factors Influencing the Impressions, and Ad-Clicks.

Industry/Domain: Marketing
Level: Beginner

Project #13

Determining Loan Status

Problem Statement:
Build a Predictive Model to Perform Classification Analysis for Determining whether a Person should be Granted Loan or Not based on Certain Factors such as Age, Gender, Income etc.

Business Outcome:

- Understand the Major Factors determining whether a Candidate should get Loan and Visualize the Hidden Patterns in the Dataset.
- Implement Different Machine Learning Models to build a Predictive Model which can Predict the Loan Status of Candidates who have applied for the Loan.

Industry/Domain: BFSI
Level: Intermediate

Project #14

Prescribing Drugs using Consumer Reviews

Problem Statement:
Analyze the Consumer Reviews using NLP Techniques to transform and Process the Data to find out Important Insights and Prescribe most appropriate Drugs for each of the Medical Conditions specified.

Business Outcome:

- Calculate Sentiment Score for understanding the Sentimental Meaning of the text.
- Perform Text Analysis for better understanding of the Data and Prescribe the Best and Worst Drugs for each of the Medical Conditions based on the Usefulness and Effectiveness of the Drugs.

Industry/Domain: Healthcare
Level: Advanced

Project #15

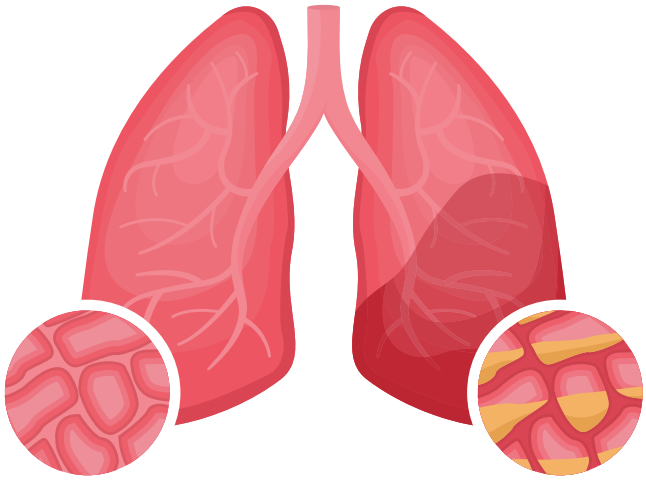
Detecting Pneumonia from Chest X-rays

Problem Statement:
Build an Image Classifier to solve Image Classification Tasks using Advanced Deep Neural Networks such as ResNets which is a High Level CNN Architecture.

Business Outcome:

- Build and Train a Deep Learning Model y using Advanced CNN Architectures such as ResNets for performing the task of Image Classification.
- Using Advanced Tricks and Techniques for Improving the Model Performance.

Industry/Domain: Healthcare
Level: Advanced



Project #16

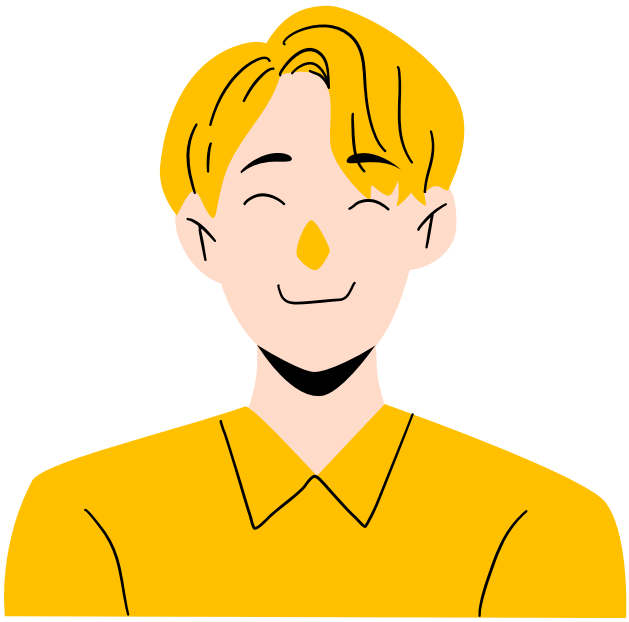
Building a Facial Expression Recognizer

Problem Statement:
Build a Face Expression Recognition Tool by using advanced Computer Vision algorithms. You will be able to detect Happiness, Sadness and Other emotions from Human Faces in Real time Videos.

Business Outcome:

- Implement and Understand the working of advanced Computer Vision Algorithms by building an Emotion Detector.
- Learn to build a Face Detection and Face Recognizer Tool from Scratch to detect and recognize Multiple Faces.

Industry/Domain: IT/Software
Level: Advanced



Project #17

Fruits Recognition using CNN

Problem Statement:
Solve a complicated Image Classification Task with Multiple Classes. In this Problem there are more than 50 different Fruits, So, we have to Train a Image Classifier which can recognize all the distinct fruits.

Business Outcome:

- Understand and Implement Complex Image Classifiers by using advanced deep learning techniques.
- Using Advanced Image Processing and Feature Engineering techniques to Improve the Accuracy and Working of the Image Classifier.

Industry/Domain: IT/Software
Level: Advanced

Project #18

Building Multi Facial Recognition System

Problem Statement:
Build a Face Detection and Recognition Tool capable of Recognizing Multiple Faces at the Same time by using advanced Deep Learning and Computer Vision Algorithms.

Business Outcome:

- Understand the basic Concept behind Image Detection and Recognition, and Improve the Model by using advanced Tricks and Techniques.
- Applying Different Concepts and Techniques to understand the Impact on the Working of the Model in Real time Systems.

Industry/Domain: IT/Software
Level: Advanced

Project #19

Stock Market Prediction

Problem Statement:
Predict the Opening or Closing Prices for Stock Market along with the Volume of the Stock. Also, try to detect the fluctuations within the Stock Data.

Business Outcome:

- Maximizing the Profit Returns while Investing Money in Stock Markets.
- Understanding the Right Time to Invest in the Stock Market.
- Clear and Calculated Notions about the Risk associated to Stock Market Investments.

Industry/Domain: BFSI
Level: Advanced

Project #20

Optimizing Agricultural Production

Problem Statement:
Precision Farming is the Need of the Hour and being adopted by almost all the developing Countries in the World. By doing this Project help the Farmers to Optimize their Crops Production.

Business Outcome:

- Clear Understanding of Climatic Factors such as Temperature, Rainfall, Humidity on different types of Crops.
- Recommendation of Crops based on the Quality and Content of the Soil to Increase Productivity and Fertilty.

Industry/Domain: Healthcare
Level: Intermediate