# Winning Space Race with Data Science

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IBM Developer SKILLS NETWORK

# Outline


1. Executive Summary
2. Introduction
3. Methodology
4. Results
5. Conclusion
6. Appendix

# Executive Summary

# Introduction

Section 1

# Methodology

# Methodology

# Data Collection

# Data Collection – SpaceX API

# Data Collection – Scraping

# Data Wrangling

# EDA with Data Visualisation

# EDA with SQL

# Build an Interactive Map with Folium

# Build a Dashboard with Plotly Dash

# Predictive Analysis (Classification)

# Results

- Exploratory data analysis results
- Interactive analytics demo in screenshots
- Predictive analysis results

Section 2

# Insights drawn from EDA

# Flight Number versus Launch Site

# Payload versus Launch Site

# Success Rate versus Orbit Type

# Flight Number versus Orbit Type

# Payload versus Orbit Type

# Launch Success Yearly Trend

# All Launch Site Names

# Launch Site Names Begin with 'CCA'

# Total Payload Mass

# Average Payload Mass by F9 v1.1

# First Successful Ground Landing Date

# Successful Drone Ship Landing with Payload between 4000 and 60000

# Total Number of Successful and Failure Mission Outcomes

# Boosters Carried Maximum Payload

# 2015 Launch Records

# Rank Landing Outcomes Between 2010-06-04 and 2017-03-20

Section 4

# Launch Sites Proximities Analysis

# <Folium Map Screenshot 1>

# <Folium Map Screenshot 2>

# Folium Map Screenshot 3

Section 5

# Build a Dashboard with Plotly Dash

# Dashboard Screenshot 1

# Dashboard Screenshot 2

# Dashboard Screenshot 3

Section 6

# Predictive Analysis (Classification)

# Classification Accuracy

# Confusion Matrix

# Conclusions

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# Appendix

# Thank you!