

# **Project Documentation**

Data Science Job Market Insights

## **1. Project Overview**

- This mini project focuses on analysing the **Data Science job market** to identify trends related to job availability, salary distribution, company characteristics, and industry demand. The project aims to transform raw job listing data into meaningful insights using data preprocessing and interactive visualization techniques.
- Microsoft Excel was used for data cleaning and preparation, while Power BI was used to build an interactive dashboard that helps users explore patterns and insights in the data science job landscape.

## **2. Tool Used**

- **Microsoft Excel** – Data cleaning and preprocessing
- **Power BI** – Data modeling, DAX measures, and interactive visualization

## **3. Dataset**

- Source: Uncleaned\_DS\_jobs.csv
- Data contains: Index, Job Title, Minimum Salary, Maximum Salary, Average Salary, Company Name, Rating, Location, Headquarters, Employee Size, Founded, Type of Ownership, Industry, Sector, Revenue, Competitors.

## **4. Steps Followed**

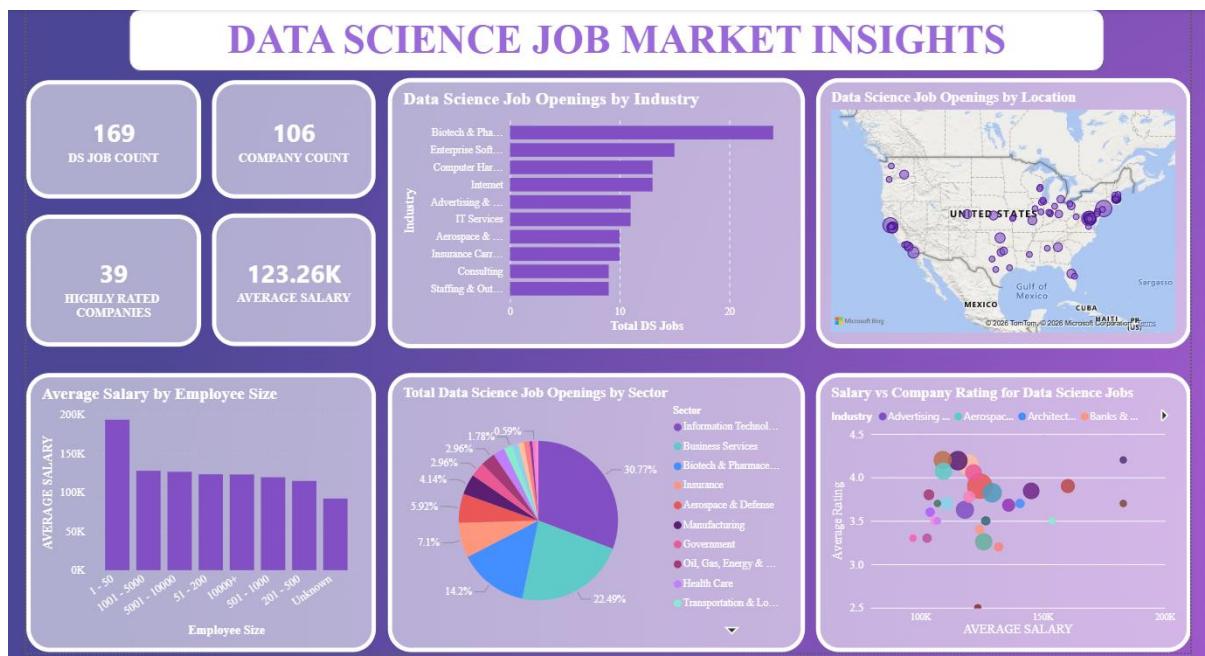
- Cleaned and pre-processed the dataset in Excel:
  - Removed blank, duplicate, and inconsistent records
  - Standardized job titles and company-related fields
- Performed basic validation and structuring in Excel
- Imported the cleaned data into Power BI
- Created DAX measures such as:
  - Total Data Science Jobs
  - Average Salary
  - Company Count
  - Highly Rated Companies
- Designed an interactive Power BI dashboard using:
  - Cards (KPIs)
  - Bar and Column Charts
  - Pie Chart

- Scatter Plot
- Map Visualization

## 5. Key Insights

- Certain industries offer a higher number of Data Science job opportunities.
- Average salaries tend to increase with company size.
- Highly rated companies generally offer competitive salary packages.
- The map visualization shows that Data Science job opportunities are concentrated across major locations within the United States
- Salary levels vary significantly across sectors and industries.

## 6. Screenshot



## 7. Files Included

- Mini\_Project\_DS\_Jobs.xlsx – Cleaned dataset
- DS\_Job\_Market\_Insights(1).pbix – Power BI dashboard
- README.md – Project description

## 8. How to Use

- Open ‘Mini\_Project\_DS\_Jobs.xlsx’ to view the cleaned data
- Open ‘DS\_Job\_Market\_Insights(1).pbix’ in Power BI desktop to explore the visuals