***NAME-ANISH SINGH WALIA***

***Exploratory Data Analysis on H1B VISA PETITIONS In USA over time***

***AIM AND OBJECTIVE* OF DOING EXPLORATORY DATA ANALYSIS ON H1B VISA DATASET (USA)**

**Inspiration**

1)Is the number of petitions with Data Engineer or any other job title has increasing over time(which would reflect the demand of those required skills) ?

2)Which part of the US has the most Hardware Engineer jobs?

3)Which industry has the most number of Data Scientist positions?

4)Which employers(CORPORATES AND COMPANIES) file the most petitions each year?

5)Which year(2011-2016) had most H1B petitions approved and for which Job Positions ?

6)Predictive modelling on for which Job titles H1B Visa petitions of foreign Nationals will be approved?

7)Predicting the no of H1B applications going to increases or decrease for a particular Job position in future?

8)Predicting the Prevailing wages of particular Job Titles for future?

**OBJECTIVES—**

**PART I. High-Applicant Employers:**

1) Which Employers send most number of H-1B visa applications?

2) What is the Percentage share out of the 85,000 visa cap for the Employers with most applications?

3) Most common Job Titles and their Relative wages to Industry standard as well as absolute?

**PART 2. Data Science related job position Analysis:**

1) Comparison of Number of applications and Wages for Data Scientist, Data Engineer and Machine Learning or other fascinations and most demanding jobs.

2) Data Science positions comparison across different industries using SOC\_NAME column

**PART 3. Location-based analysis for Data Scientist related jobs:**

1) How does the Wage for Data Science related positions vary by state? By worksite?

2) Are the jobs concentrated in few specific regions and in which specific regions on USA?

**THE VARIABLES AND THEIR DESCRIPTION**

* **CASE\_STATUS**: Status associated with the last significant event or decision. Valid values include “Certified,” “Certified-Withdrawn,” Denied,” and “Withdrawn”.
* **EMPLOYER\_NAME**: Name of employer submitting labor condition application.
* **SOC\_NAME**: Occupational name associated with the SOC\_CODE. SOC\_CODE is the occupational code associated with the job being requested for temporary labor condition, as classified by the Standard Occupational Classification (SOC) System.
* **JOB\_TITLE**: Title of the job
* **FULL\_TIME\_POSITION**: Y = Full Time Position; N = Part Time Position
* **PREVAILING\_WAGE**: Prevailing Wage for the job being requested for temporary labor condition. The wage is listed at annual scale in USD. The prevailing wage for a job position is defined as the average wage paid to similarly employed workers in the requested occupation in the area of intended employment. The prevailing wage is based on the employer’s minimum requirements for the position.
* **YEAR**: Year in which the H-1B visa petition was filed
* **WORKSITE**: City and State information of the foreign worker's intended area of employment
* **lon**: longitude of the Worksite
* **lat**: latitude of the Worksite