

About Dataset: Salary Data Set Description

When a US company wants to hire someone from outside of the United States for a technical position, they have to file an application to the United States government to get a green card or visa for the foreign applicant. These applications allow the US government to track who is entering and leaving the country for work-related reasons, and ensure that immigrants are neither being taken advantage of nor causing adverse effects for U.S. workers. To ensure equity for US and non-US workers, companies have to state how much they are planning on paying the employee every time they submit a visa or green card application. They also have to state the average amount an employee with similar skills and background typically gets paid for the same position, a figure called “the prevailing wage.” This publicly available data provides a unique view into what types of salaries you might encounter for different data-related jobs in the US.

Questions

- ➔ **What is difference between mean paid wage salary between Data Analyst and Data Scientist.**
- ➔ **What is the difference mean paid wage salary between green card and H-1B visa holders for data analyst and data scientist?**
- ➔ **What is the difference mean paid wage salary between California and Texas state for data analyst and data scientist?**
- ➔ **Which companies have the highest salaries for data analyst and data scientist job title?**

Data Analysis

Data Scientist

Min	1 st Quartile	Median	Mean	3 rd Quartile	Max
39080	88250	110000	108000	127800	230000

The average salary for a data scientist is \$110,000. 50% of the data scientists has more than \$110,000 salary and vice versa. The salary range for the data scientists are from \$39,080 to \$230,000. The salary is depending on the number of years of experience, education, skills, geographic area and the company.

Data Analyst

Min	1 st Quartile	Median	Mean	3 rd Quartile	Max
29410	60000	65000	70030	78000	746300

The average salary for a data analyst is \$65,000. 50% of the data scientists has more than \$65,000 salary and vice versa. The salary range for the data scientists are from \$29,410 to \$746,300. Here, the salary is depending on the number of years of experience, education, skills, geographic area and the company.

Comparison of Salary of Data Scientists and Data Analyst

	X	Y
95 % Confidence Interval	36241.87	39740.05
Mean of x and y	108021.04	70030.08
	Where p-value < 0.05	
Salary per year	-1000	257.1

The mean salary of data scientist is \$108021.04 and data analyst is \$70030.08, therefore the data is far apart from each other. P-value is less than 0.05, therefore it is statistically significant. For data scientist, salary is decreasing \$1000 per year. For data analyst, salary is increasing \$257 per year.

Effect Size

For the Data Scientist Salary and Data Analyst Salary, $d=0.062$

Cohen's effect size value ($d = 0.062$) suggested a low practical significance.

Other Observations:

- Data scientist has more salary in San Francisco (\$114,850) than New York (\$105,429). The p-value is less than 0.05 and 95% confidence interval does not contain zero, therefore it is statistically significant.
- Data analyst has more salary in San Francisco (\$85,951) than New York (\$72,318). The p-value is less than 0.05 and 95% confidence interval does not contain zero, therefore it is statistically significant.
- Data scientist has more salary as Green Card holder (\$116,507) than H1B (\$107,429). The p-value is less than 0.05 and 95% confidence interval does not contain zero, therefore it is statistically significant.
- Data analyst has more salary as Green Card holder (\$90,197) than H1B (\$67,249). The p-value is less than 0.05 and 95% confidence interval does not contain zero, therefore it is statistically significant.
- Data scientist has more salary in California (\$117,498) than Texas (\$89,126). The p-value is less than 0.05 and 95% confidence interval does not contain zero, therefore it is statistically significant.
- Data analyst has more salary in California (\$78,766) than Texas (\$64,815). The p-value is less than 0.05 and 95% confidence interval does not contain zero, therefore it is statistically significant.
- Data scientist has more salary as a full time employee (\$107,651) than non-full time employees (\$111,467). The p-value is not less than 0.05 and 95% confidence interval contains zero, therefore it is not statistically significant.
- Data analyst has more salary as a full time employee (\$69,407) than non-full time employees (\$64,696). The p-value is not less than 0.05 and 95% confidence interval contains zero, therefore it is not statistically significant.

TOP DATA SCIENTIST PAID EMPLOYER

ADOBE SYSTEMS INCORPORATED

EBH ENTERPRISES, INC.

ADARA MEDIA, INC.

FACEBOOK, INC.

THE PNC FINANCIAL SERVICES GROUP, INC.

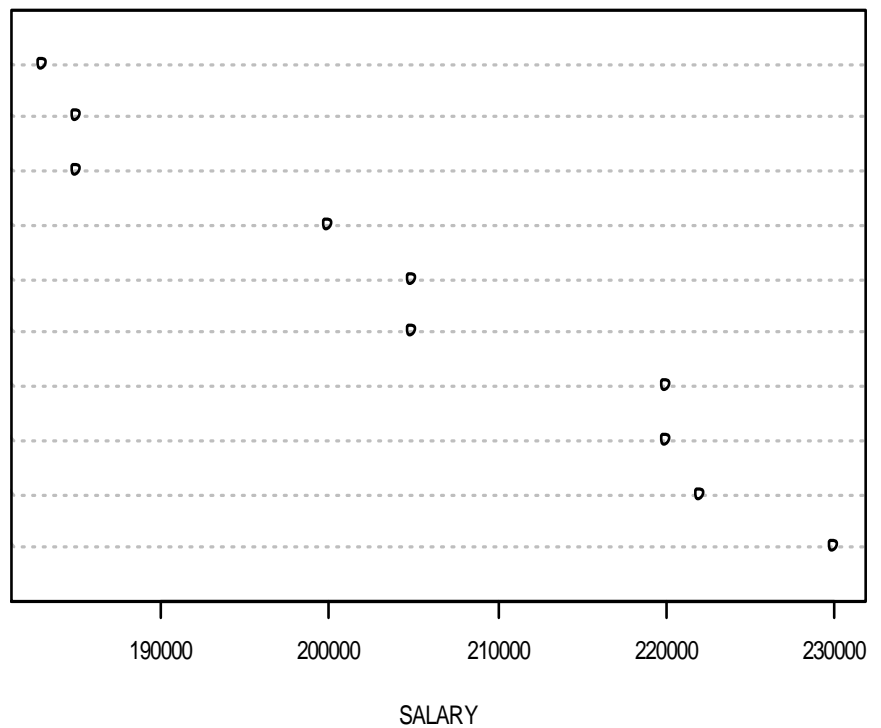
BAIDU USA LLC

NETFLIX

NETFLIX, INC.

ADOBE SYSTEMS INCORPORATED

NETFLIX, INC.



TOP DATA ANALYST PAID EMPLOYER

FIRST REPUBLIC BANK

AVISO, INC.

AMICUS SYSTEMS INC

AMICUS SYSTEMS INC

AMICUS SYSTEMS INC

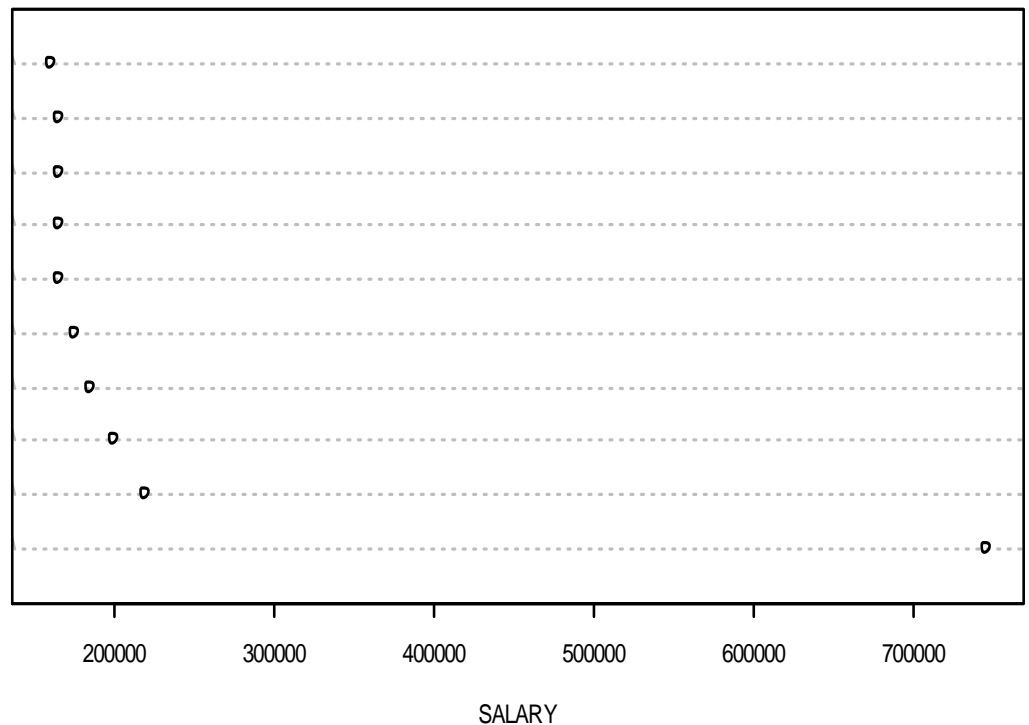
NETFLIX, INC.

KNOWLEDGENT GROUP INC.

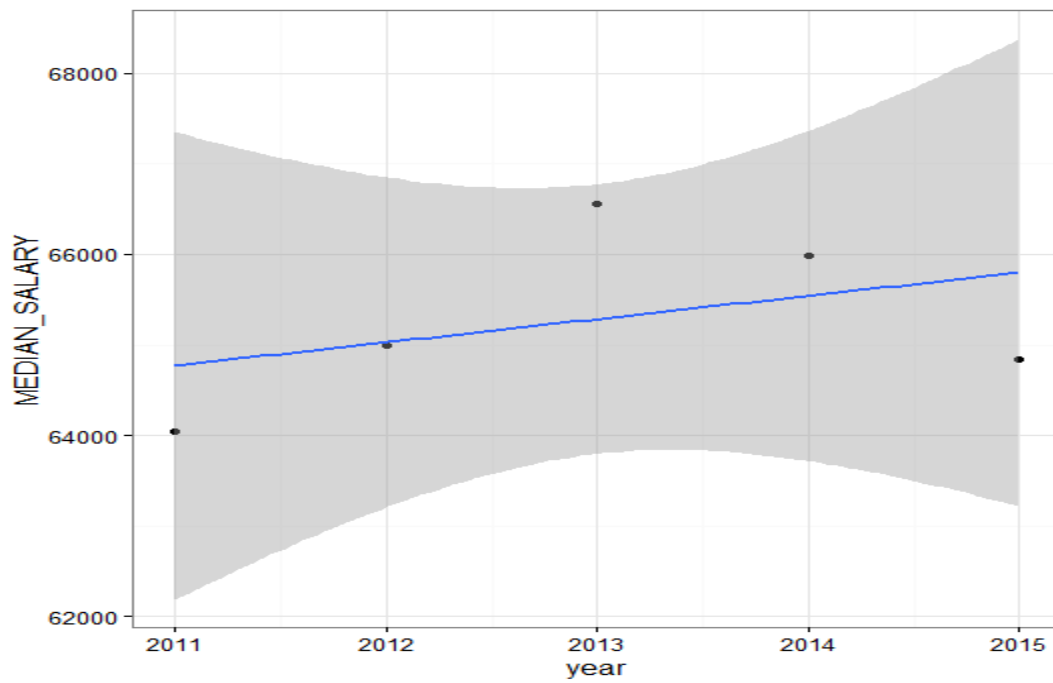
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NETFLIX, INC.

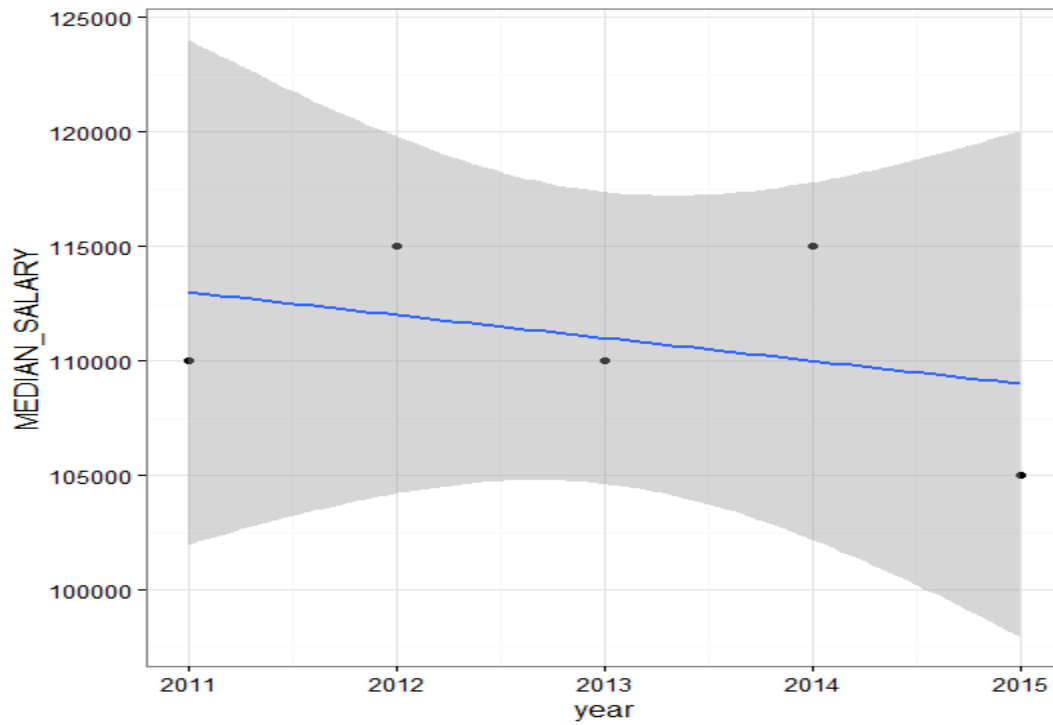
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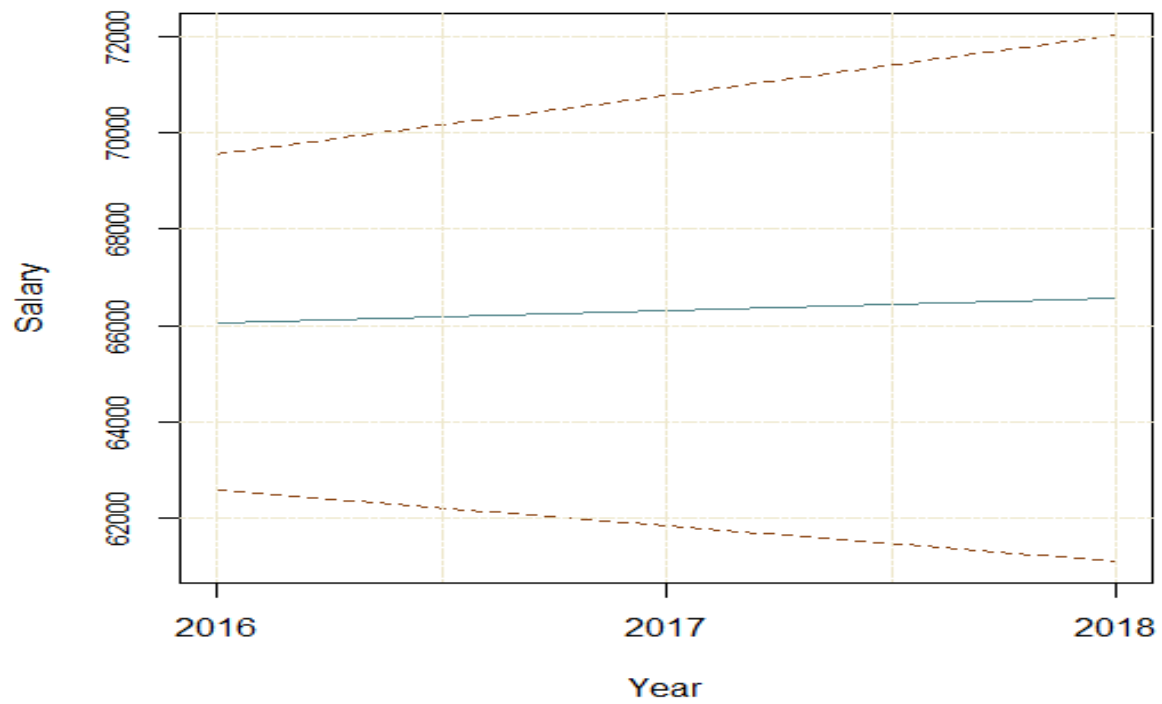


Confidence Interval for Data Nalyst Salary



Confidence Interval for Data Scientist



Forecast Salary of DA**Forecast Salary of DS**