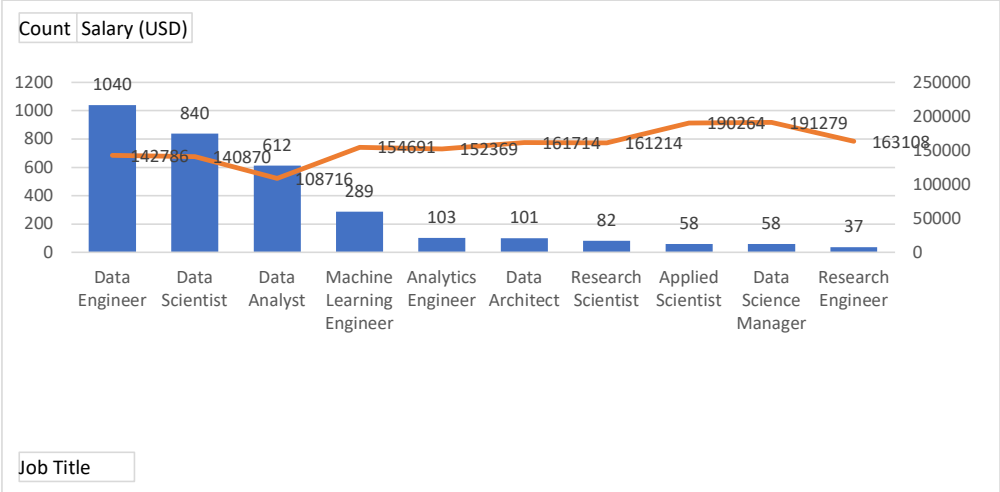
Questions and Answers

1) Which are the top 10 popular job designations? Also give their average salaries.

Year
2020	2021	2022	2023

Designation	Count	Salary (USD)
Data Engineer	1040	142786
Data Scientist	840	140870
Data Analyst	612	108716
Machine Learnir	289	154691
Analytics Engine	103	152369
Data Architect	101	161714
Research Scienti	82	161214
Applied Scientist	58	190264
Data Science Ma	58	191279
Research Engine	37	163108



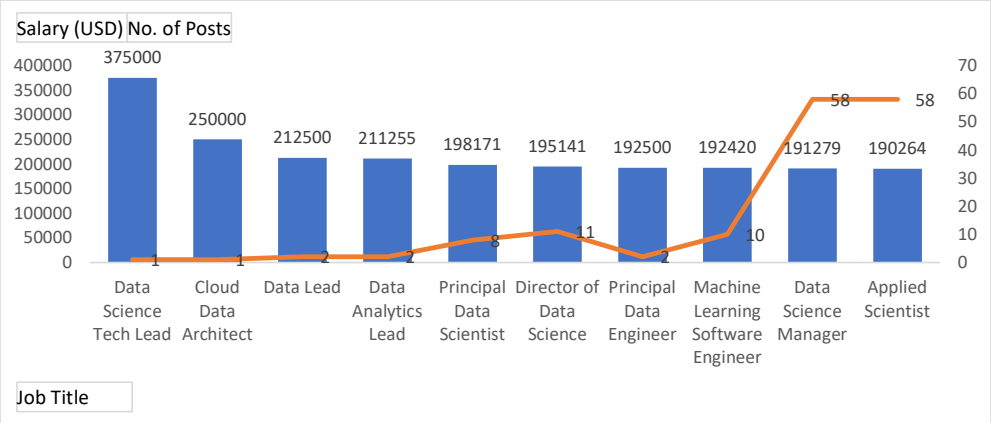
Data Engineer appears to be the most popular job designation over the years followed by data scientist then data analyst. Observe that the most popular job designations aren't necessarily the highest paid ones.

2) Which are the top 10 highest paid job designations over the years? What are the number of posts?

Year
2020	2021	2022	2023

Designation	Salary (USD)	No. of Posts
Data Science Tec	375000	1
Cloud Data Arch	250000	1
Data Lead	212500	2
Data Analytics Le	211255	2
Principal Data Sc	198171	8
Director of Data	195141	11

Principal Data Er	192500	2
Machine Learnir	192420	10
Data Science Ma	191279	58
Applied Scientis	190264	58



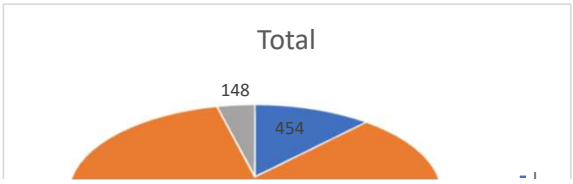
Data Science Tech Lead is the highest paid job designation followed by Cloud Data Architect and then Data Lead. All these top 10 job designations seem to have senior or executive level experience.

3) Compare the company sizes and salaries offered by them over the years.

Avg. Salary	Company Size		
Year	L	M	S
2020	101000	106626	70959
2021	107166	74463	82129
2022	121282	137132	78051
2023	133379	150867	78580

The median salary offered by Medium-sized companies is higher than that of the Large and Small sized companies. Also both Medium and Large sized companies show wide distribution of the salaries offered.

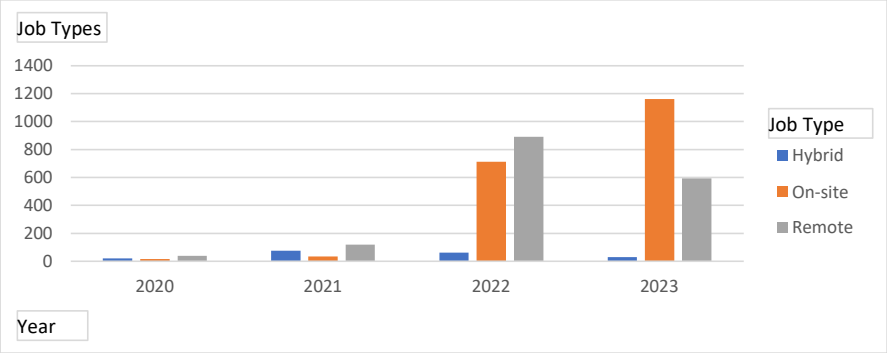
4) Which companies are preferred by employees if we consider sizes?



The companies with medium size are preferred by the employees the possible reason could be the higher average salary.

5) Give the number of employees working remote,hybrid and on-onsite over the years.

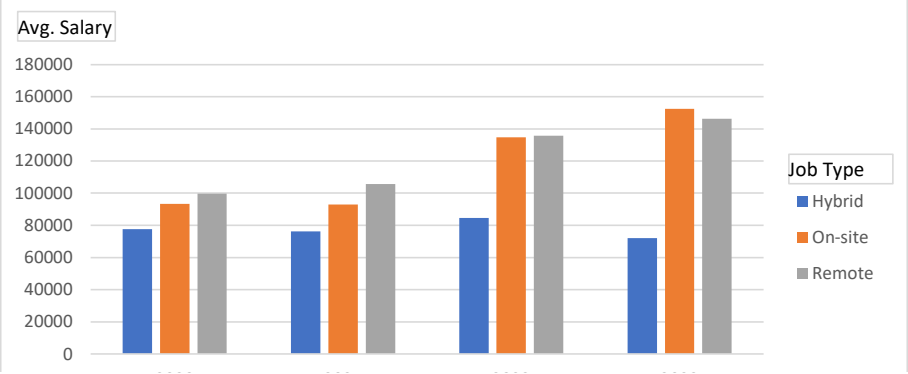
Job Types Year	Count Hybrid	On-site	Remote	Grand Total
2020	21	16	39	76
2021	76	34	120	230
2022	62	711	891	1664
2023	30	1162	593	1785
Grand Total	**189**	**1923**	**1643**	**3755**

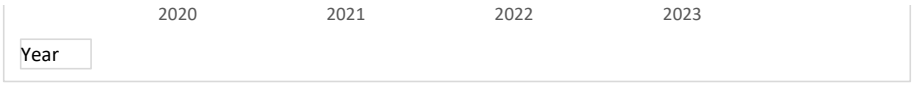


The number of on-sites job types have increased rapdily, and the remote workers seem leseer than before while hybrid follows the constant trend.

6) Which job type gets the highest average salary over the year?

Avg. Salary Year	Hybrid	On-site	Remote
2020	77591	93426	99763
2021	76104	92900	105813
2022	84561	134719	135631
2023	72054	152394	146380



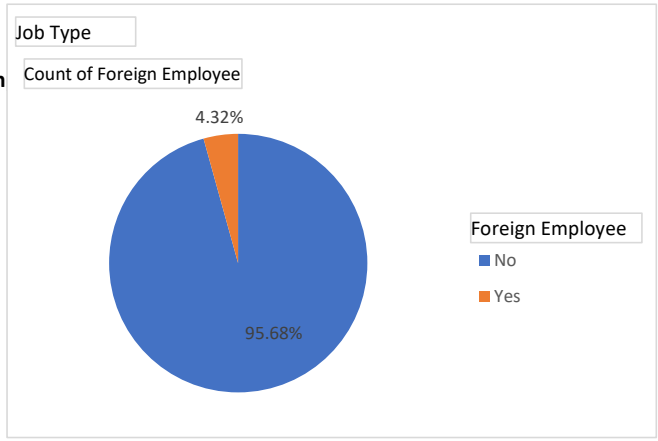


Before year 2022 the remote workers were getting higher salaries, in 2022 for both job types the salaries are almost the same, but in 2023 on-site workers are earning slightly more than the remote workers. The average salary of a hybrid worker remains almost the same over the years.

7) What percentage of the remote workers are foreign?

Job Type	Remote

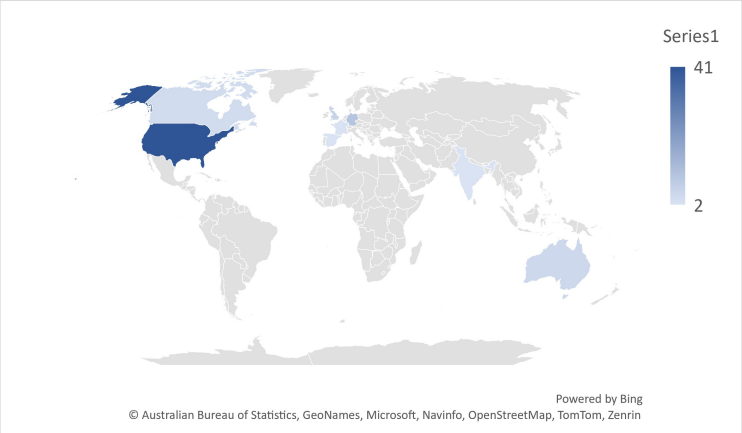
Row Labels	Count of Foreign Em
No	95.68%
Yes	4.32%
Grand Total	**100.00%**



Only 4.32% of the remote workers are foreign i.e. from another country, all the others live in the same country and work remotely.

8) In which country the most foreign employees work?

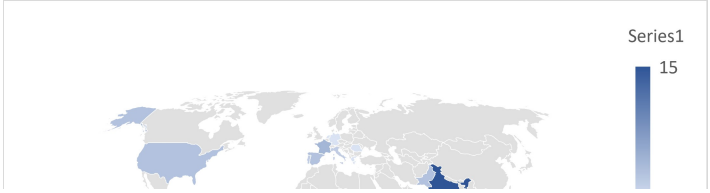
Name of the Country of Top 10 Countrie	No. Remote Yes
USA	41
DEU	10
GBR	6
AUS	5
CAN	4
SGP	2
LUX	2
ASM	2
ESP	2
FRA	2
IND	2



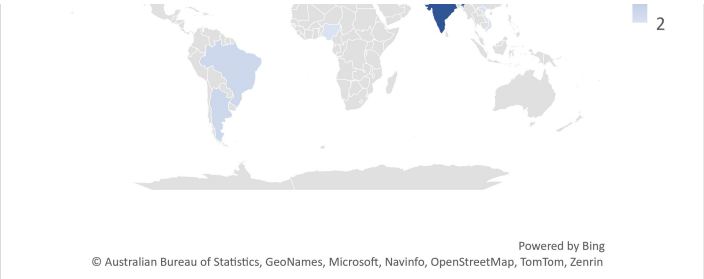
Most foreign workers work in USA followed by Germany.

9) From which country the most foreign employees work?

Name of the Country	Column Labels Counts
IND	15
FRA	6
PAK	5
USA	5
ESP	5
PRT	4



ITA	4
ARG	3
BRA	3
NLD	2
ROU	2
VNM	2
DEU	2
GRC	2
NGA	2
POL	2
CAN	2
BOL	2
RUS	2
AUS	2
UZB	2



Most foreign workers are from India.

10) Which currency is the weakest and which is the strongest?

Curerncy	Conversion Rate
CLP	759.28
HUF	328.14
JPY	108.83
INR	77.05
THB	33.95
CZK	23.38
MXN	21.49
TRY	8.92
HKD	7.84
DKK	6.37

Currency	Conversion Rate
GBP	0.81
EUR	0.92
CHF	0.95
USD	1.00
CAD	1.29
SGD	1.35
AUD	1.42
ILS	3.54
PLN	4.21
BRL	5.25

Above is the list of weakest and strongest currencies. Here Chilean Peso is the weakest and British Pound is the strongest.

11) Which country has the highest people working in the field of data science?

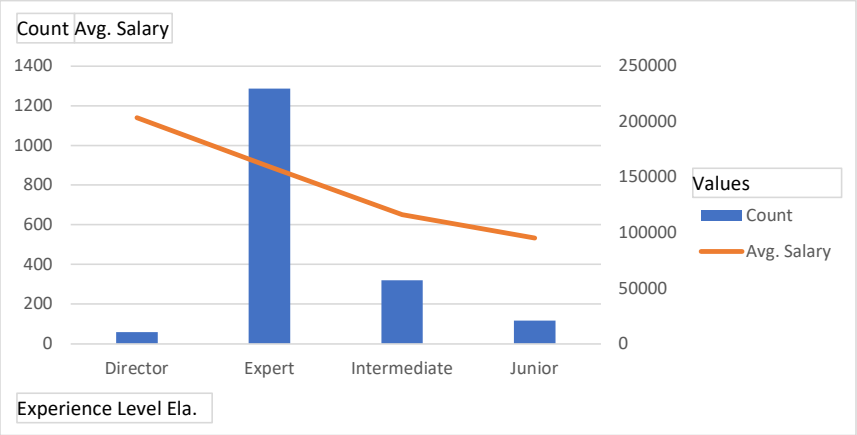
Countries	No. of People
USA	3004
GBR	167
CAN	85
ESP	80
IND	71
Grand Total	**3407**

There are so many people working in the field of data science from united states alone.

12) Compare the salary with experience level over the years.

Experience Leve	Count	Avg. Salary
Director	60	203705.6833
Expert	1287	159568.9285
Intermediate	320	116297.5969
Junior	118	95283.9661
Grand Total	**1785**	**149045.5412**

Year	
2020	2021
2022	2023



The average salary decreases with decrease in experience level. Also the number of experts in this field is large, however very few are having executive level experience.

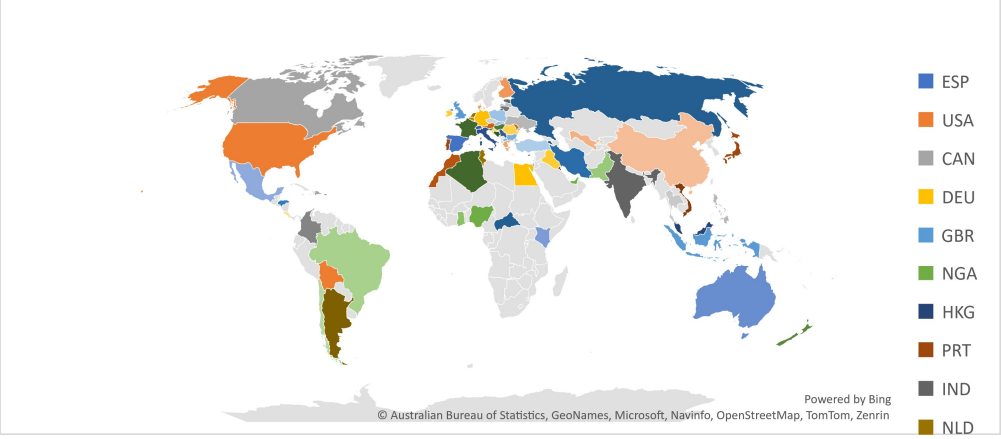
13) Compare the employment type with salary

Employment Ty	Count	Avg. Salary
Contract	10	113446.9
Freelance	10	51807.8
Full-time	3718	138314.1996
Part-time	17	39533.70588

A large portion of the employees prefer to work full-time and getting paid accordingly.

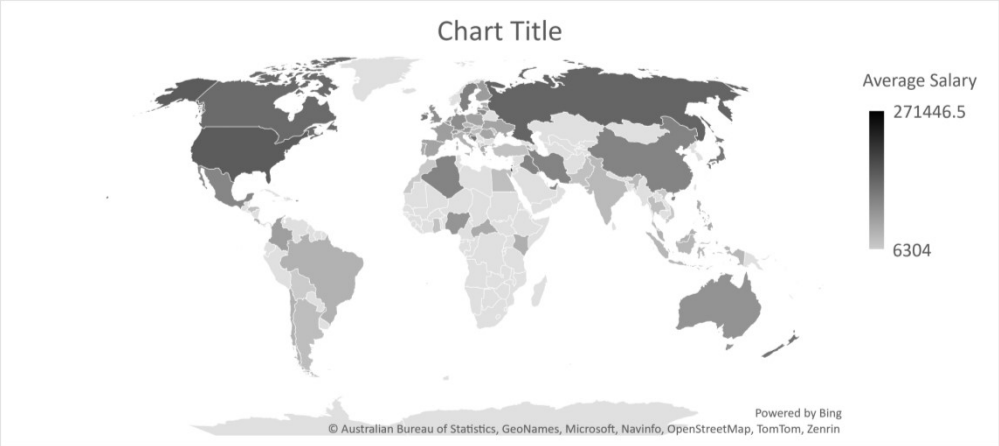
14) Show which are all countries involved in the survey.

We can see the countries involved in the survey using world map.

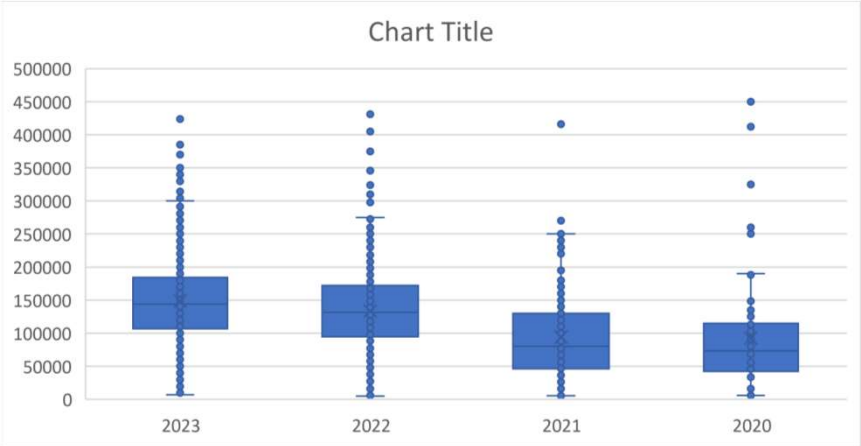


15) What is the average salary offered to an employee from each country?

16) What is the average salary offered in each country of the company location?



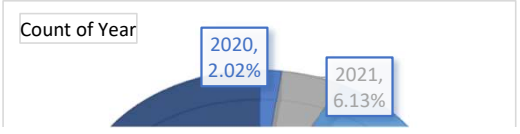
17) Show the distribution of salaries offered over the years.



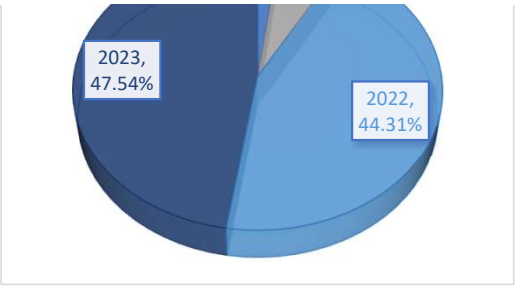
The median salary for data science job designations has been increasing over the years. Also the data seems rightly skewed i.e. very few number of people are getting higher amount of salaries.

18) Analyze the number of job posts over the years.

Row Labels	Count of Year
2020	2.02%
2021	6.13%
2022	44.31%



2023	47.54%
Grand Total	**100.00%**



In the above pie chart the year 2023 contributes maximum in the number of posts followed by 2022. We can see that the field is growing immensely and it will continue to do so.