Navigating Global Talent: Insights from U.S. Visa Salary Data (2008-2015)

Team Krypton

Dataset Background

The dataset analyzed, sourced from the U.S. Department of Labor's Office of Foreign Labor Certification, encompasses 167,278 records from 2008 to 2015, detailing visa and permanent residency applications for technical positions in the U.S. This dataset is crucial for analyzing trends in salary levels for foreign workers in technical fields, ensuring fair compensation practices, and understanding the dynamics of the U.S. workforce in relation to global talent acquisition.
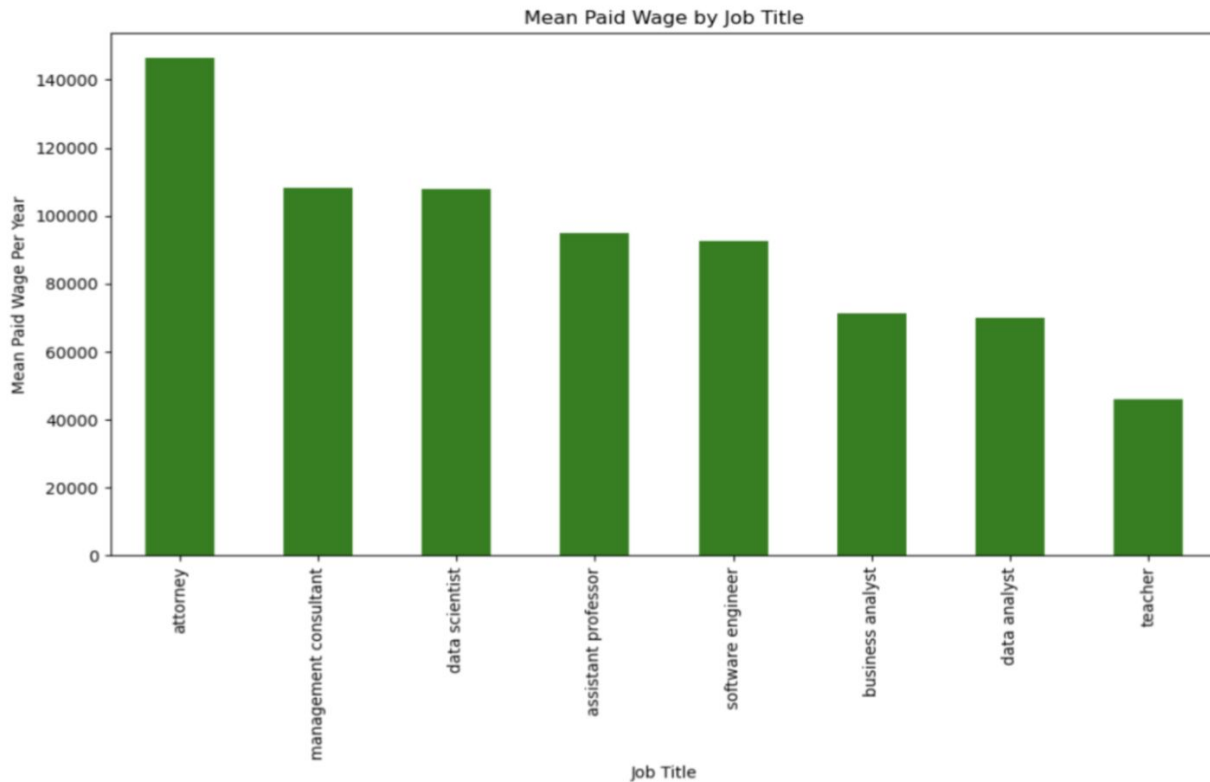
Objectives

- To aid & assist immigrants looking to work in data-driven roles in the US with key insights & takeaways that they can use to help make well-informed decisions regarding their careers.
- To answer common questions immigrants seeking these roles might have using relevant data.
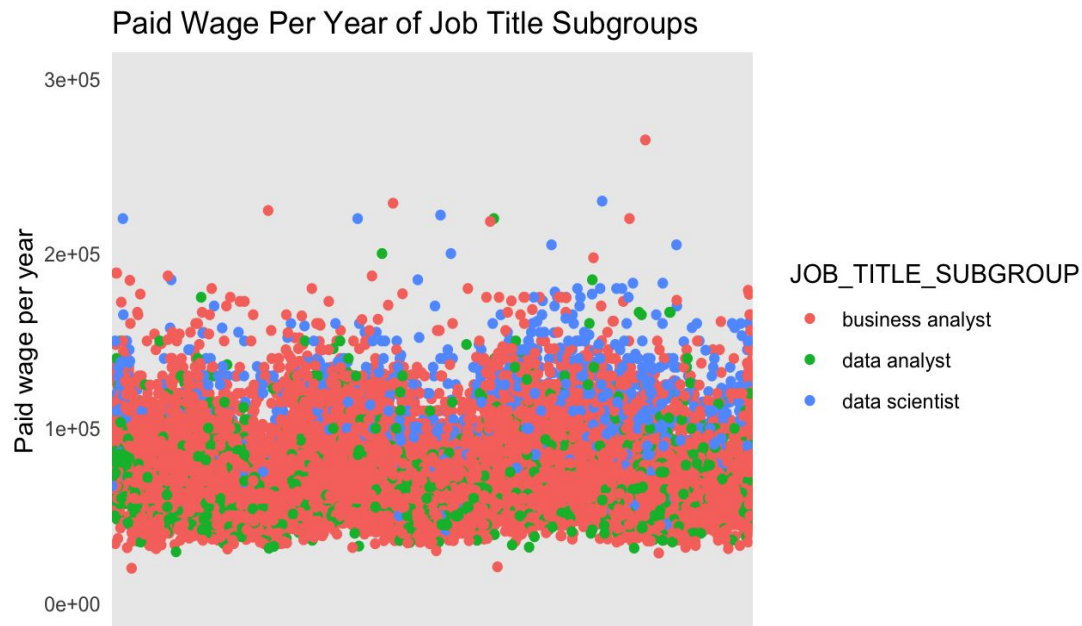
What technical jobs pay the most?

Average Salaries by Job Title:
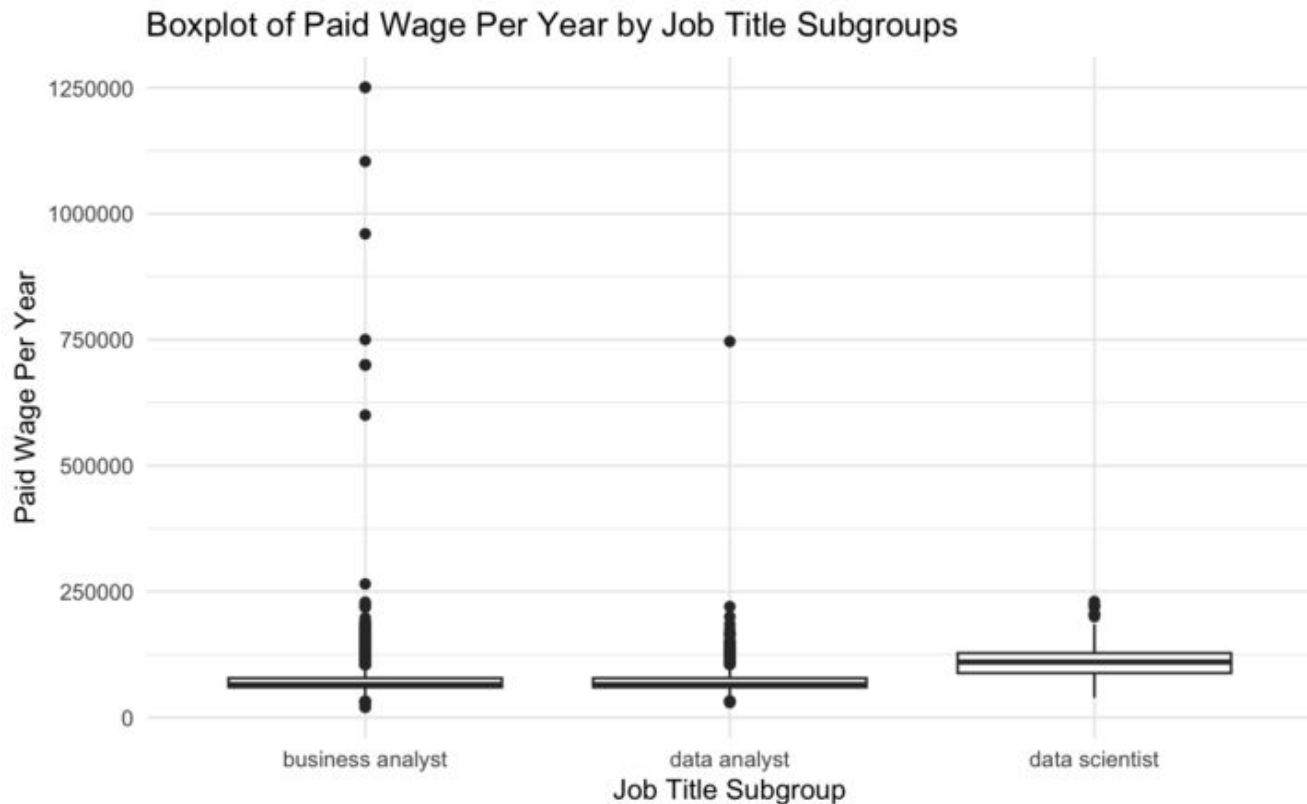

Mean Paid Wage by Job Title

What Jobs in Data Related Jobs Pay the Most?

- All data job titles are relatively high paying.
- Business Analyst & Data Analyst salaries are significantly less on average compared to Data Scientist salaries
- The variance in salaries is greater for Business Analyst & Data Analyst job titles.

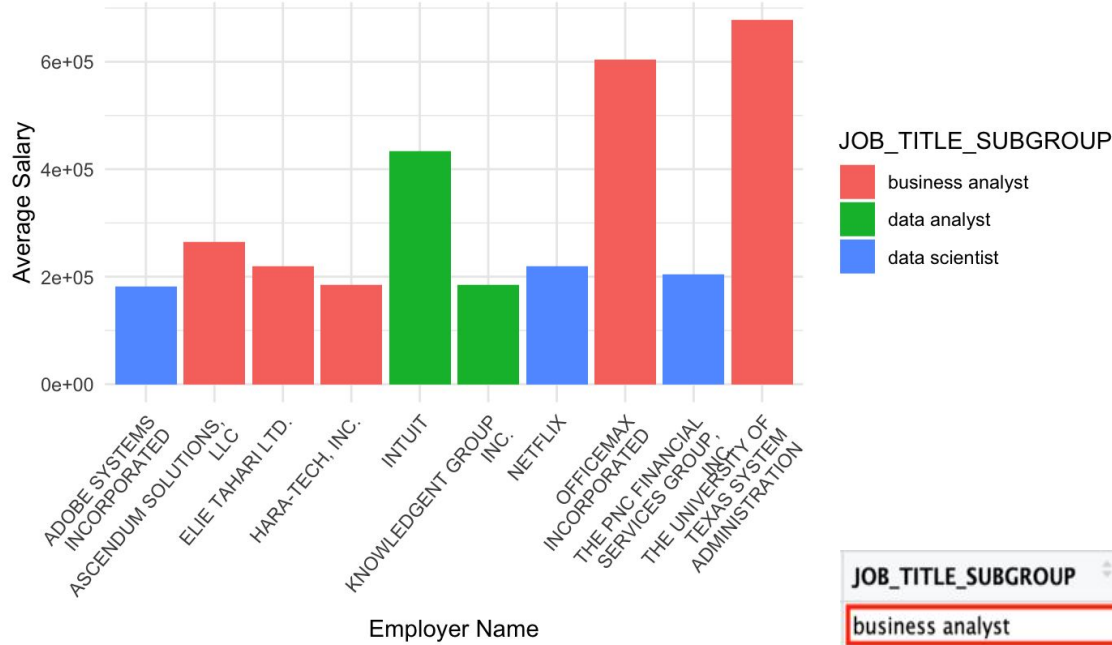| JOB_TITLE_SUBGROUP	AvgSalary
data scientist	108021.04
business analyst	71300.08
data analyst	70030.08

Paid Wage Per Year of Job Title Subgroups

JOB_TITLE_SUBGROUP
- business analyst
- data analyst
- data scientist

Expanding Upon Variance in Data Science Jobs:

Boxplot of Paid Wage Per Year by Job Title Subgroups

Expanding Upon Variance in Data Science Jobs:

Boxplot of Paid Wage Per Year by Job Title Subgroups

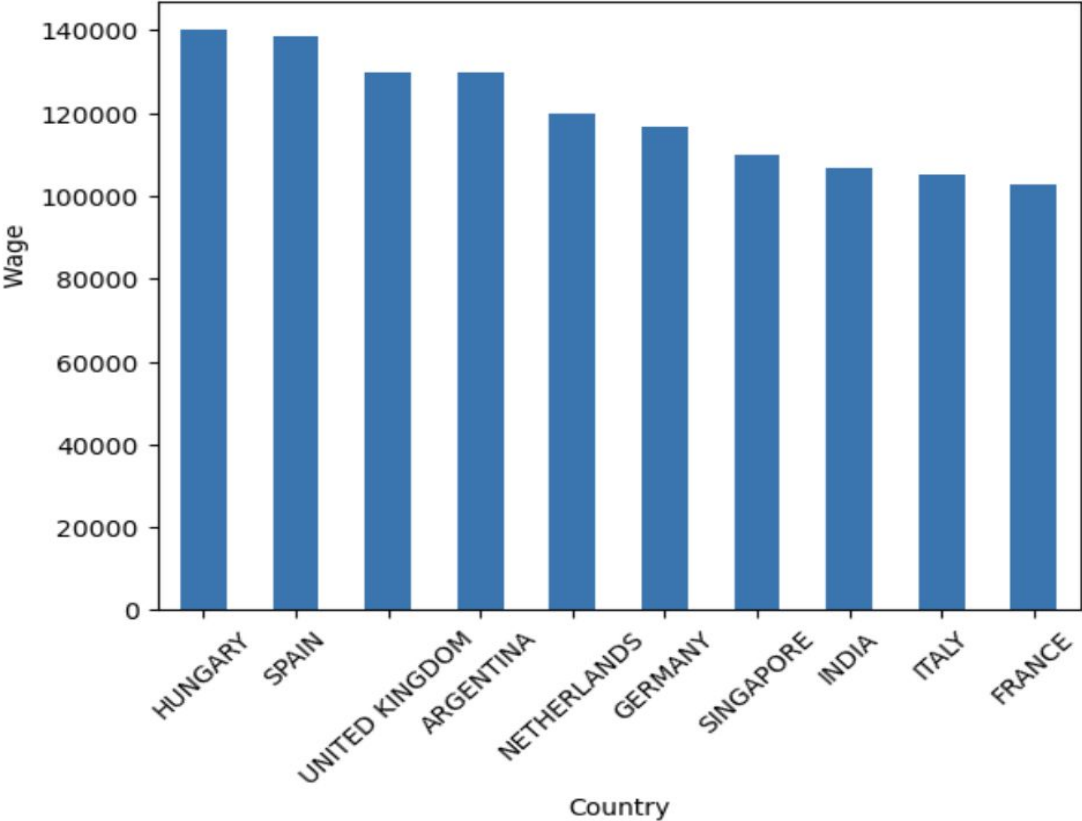Top Employers with the Highest Average Salaries for Each Job Subgroup

- **Data Scientists**: Big Tech Companies & Financial Firms
- **Data Analysts:** Financial Firms & Consulting Firms
- **Business Analysts:** Consumer Goods firms & Educational Institutions (Especially UT Austin!)

JOB_TITLE_SUBGROUP	EMPLOYER_NAME	AvgSalary
business analyst	THE UNIVERSITY OF TEXAS SYSTEM ADMINISTRATION	677508.0
business analyst	OFFICEMAX INCORPORATED	603711.7
data analyst	INTUIT	433161.5
business analyst	ASCENDUM SOLUTIONS, LLC	264992.0
business analyst	ELIE TAHARI LTD.	220000.0
data scientist	NETFLIX	220000.0

What is the wage difference among country of origin for immigrant workers in data related positions?

Top 10 Non-US Citizen Workers Average Wage in Data Jobs by Citizenship Breakdown

COUNTRY_OF_CITIZENSHIP	AVERAGE_WAGE
HUNGARY	140000.000000
SPAIN	138536.000000
UNITED KINGDOM	130000.000000
ARGENTINA	129936.900000
NETHERLANDS	120000.000000
GERMANY	116666.000000
SINGAPORE	110000.000000
INDIA	106582.757303
ITALY	105000.220000
FRANCE	102738.143333

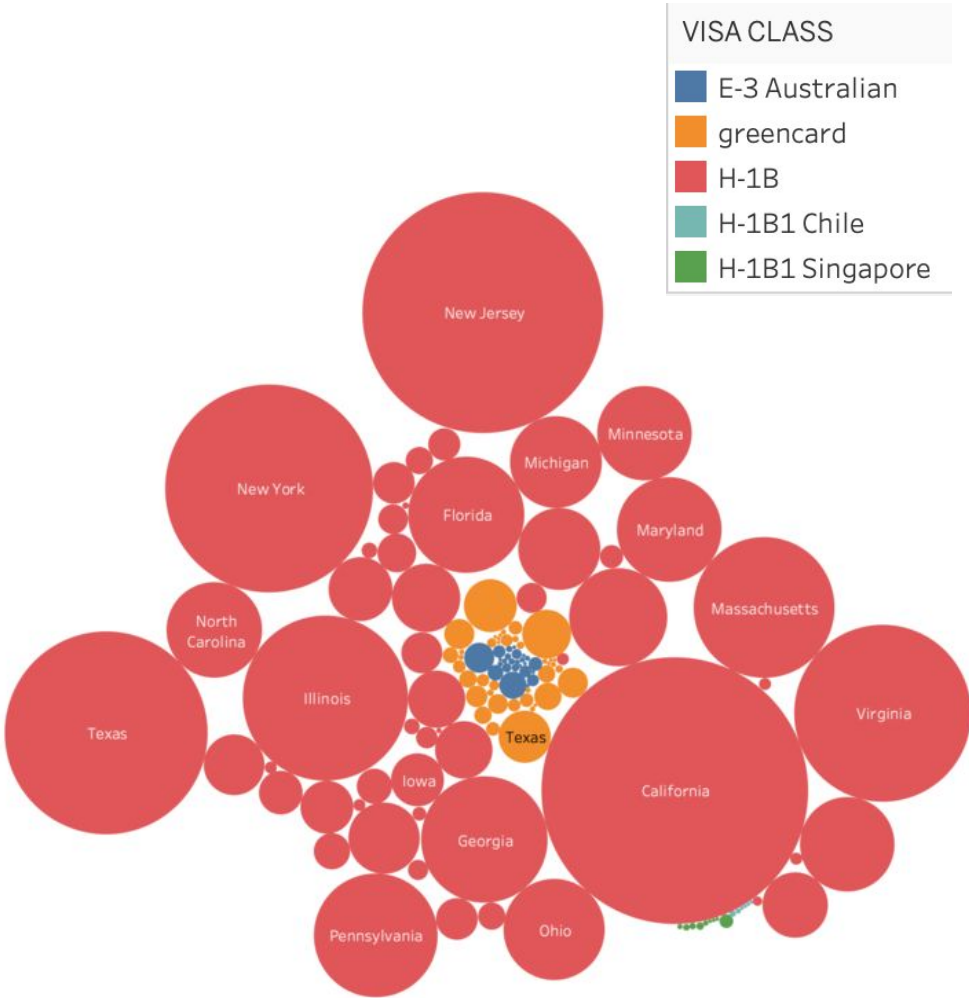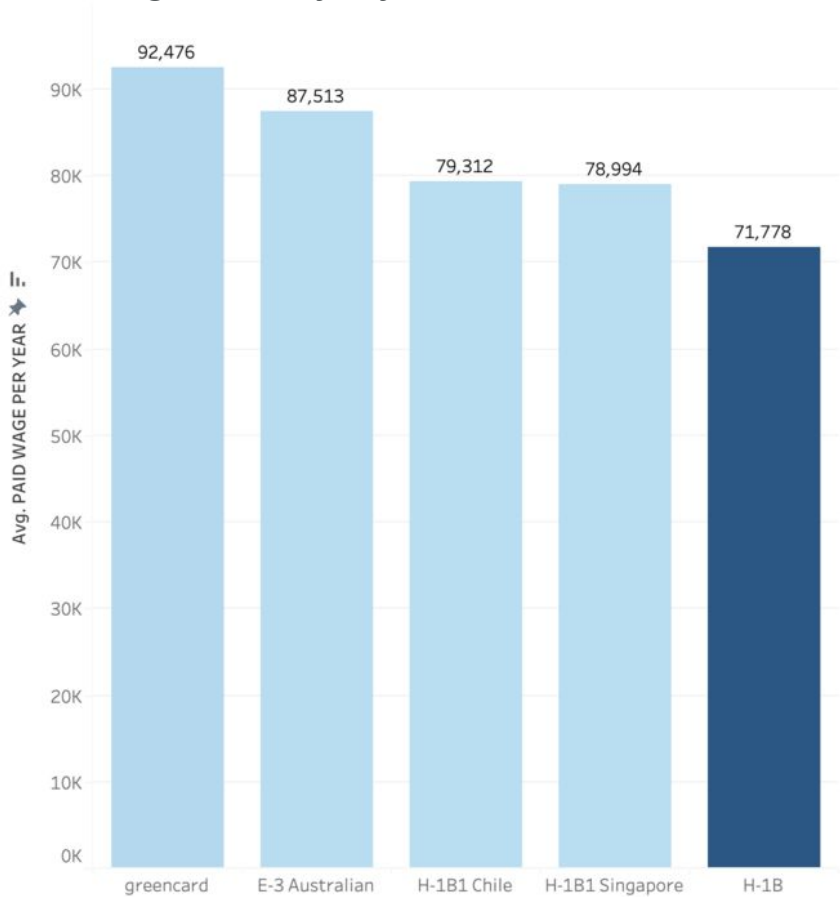# Top 10 Highest-Paid Data Jobs for Non-US Workers

JOB_TITLE	COUNTRY_OF_CITIZENSHIP	AVERAGE_WAGE
Technical Data Analyst	INDIA	746323.00
Senior Data Scientist	CHINA	175000.00
DATA SCIENTIST	INDIA	150000.00
Sr. Big Data Analyst	HUNGARY	140000.00
DATA SCIENTIST	SPAIN	138536.00
Data Scientist	GERMANY	137506.00
	FRANCE	133766.43
	INDIA	131397.64
Staff Engineer, Data Scientist	INDIA	130000.00
Data Scientist	TAIWAN	130000.00

Average Wage

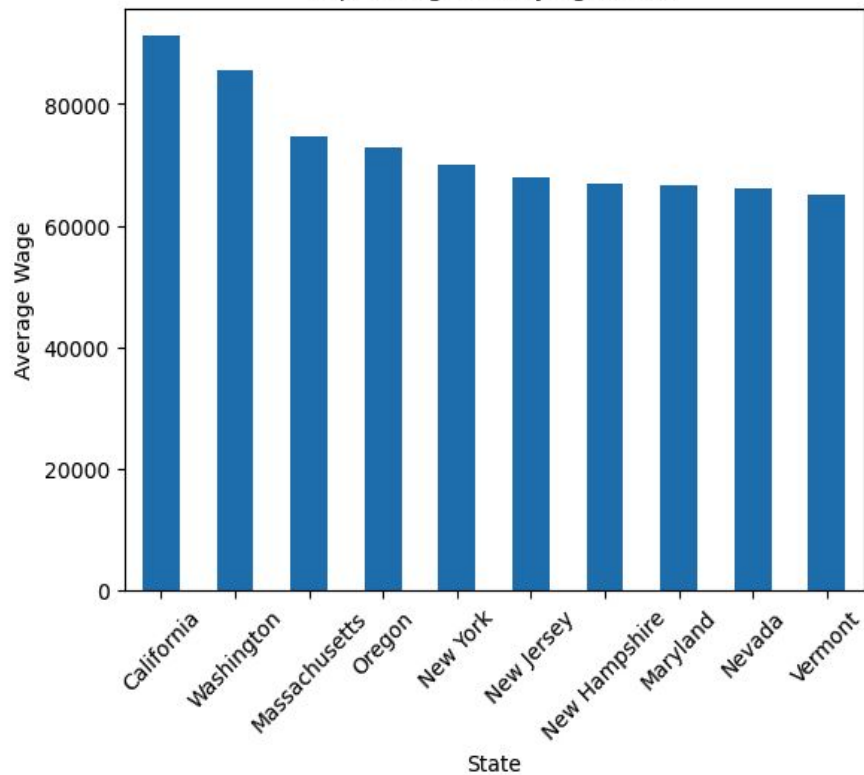| JOB_TITLE_SUBGROUP	AvgSalary
data scientist	108021.04
business analyst	71300.08
data analyst	70030.08

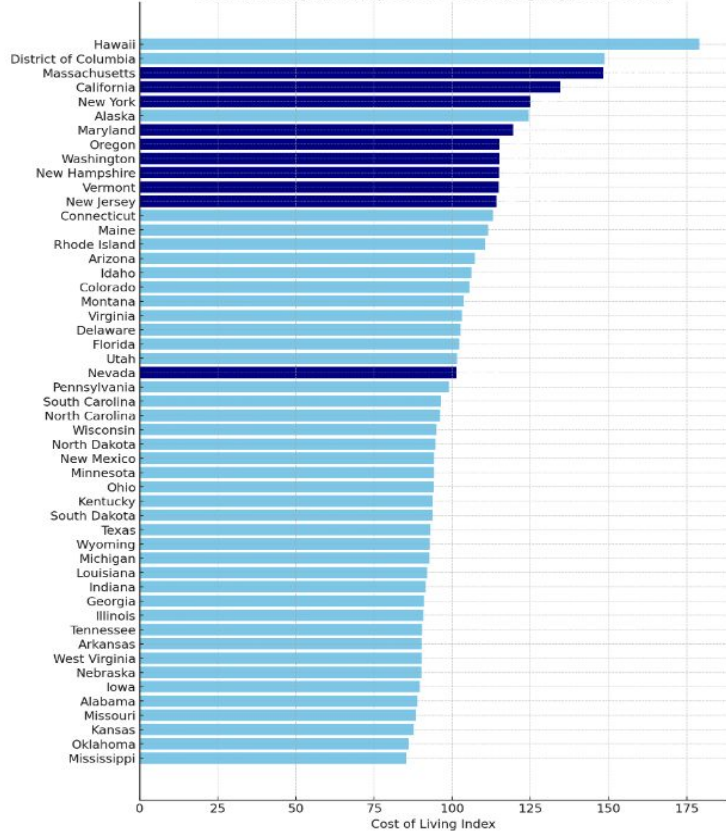What visa class gets paid the most?

Average Salary by Visa Class

What States Have the Highest Salaries?

Top 10 Highest Paying States

Cost of Living Index by State - 2023 (Highlighted States)

*Cost of living data sourced from Population World Review (2023)

JOB_TITLE_SUBGROUP	WORK_STATE	AvgSalary
data scientist	California	117824.16
data scientist	Washington	116132.61
data scientist	Minnesota	111457.00
data scientist	New York	106332.28
data scientist	Oregon	106140.85
data scientist	District of Columbia	105312.50
data scientist	Arizona	105117.73
data scientist	Connecticut	103540.00
data scientist	Utah	102578.49
data scientist	Massachusetts	102068.95

JOB_TITLE_SUBGROUP	StateCount
data scientist	31
business analyst	15
data analyst	7

Key Takeaways

Key Takeaways | Salaries by Job Title

- Immigrants that are looking to start off with the highest salary overall should choose to become an Attorney.
- Teachers make the lowest average salaries compared to all other job-titles.
- Immigrants that are looking to start off with the highest salary in the field of data scientist should choose to become a data scientist.
- Immigrants that decide to pursue other data roles should not be disheartened; salaries are still significantly higher than the national average & mid to late career salaries for analyst roles are just as high (if not higher, in some cases) as Data Scientist roles.
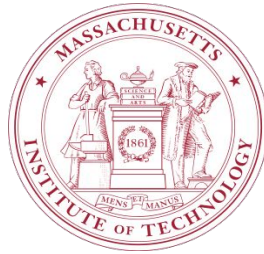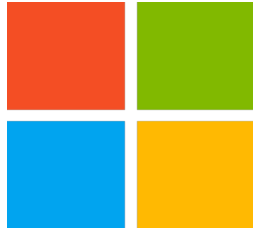
Key Takeaway | Data related Sectors

- The sector or industry that pays the most significantly depends on the job-title, even within the field of Data.
- Surprisingly, while Data Scientist roles pay higher on average compared to Business & Data Analysts roles, The highest paying roles outright in the dataset are Business Analyst roles.

Key Takeaways | Salaries by Citizenship

- Non-US citizen workers in data-related professions earn an average of more than $100,000 per year.
- Technical Data Analyst, Senior Data Scientist & Data Scientist are the top 3 highest-paying data-related professions for non-US Citizens.
- Hungary, Spain, Argentina, The United Kingdom, & The Netherlands are the top 5 countries of origin of these workers.
- Citizens from all countries in the data positions can expect to receive relatively high salaries

Key Takeaways | Salaries by State

- California & Washington State (major tech hubs) & Massachusetts (Harvard, MIT) offer the highest salaries on average for prospective immigrants.
- Nevada provides immense value considering their high salaries relative to their low cost of living.

GitHub Repository for Krypton

HTTPS: https://github.com/chavezp92/Krypton.git

SSH: git@github.com:chavezp92/Krypton.git

Questions?

Team Krypton hopes that these insights aid immigrants looking to work in the U.S. in technical roles.