

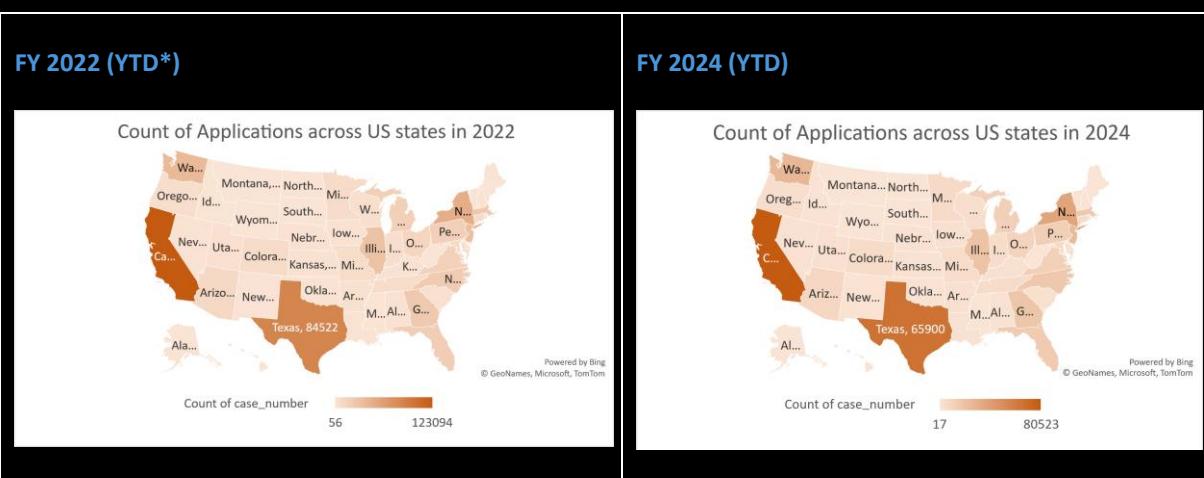
# Data Management Assignment



## H1B Analysis

### Executive Summary

- The H-1B visa program remains a crucial pathway for international students pursuing employment in the U.S., especially in fields like Business Analytics and STEM. Our analysis highlights significant trends from recent data, revealing a total of 626,084 applications in 2022 and 442,374 in Q1 to Q3 of 2024. After addressing 587,378 null values, the valid records total 1,068,458, leading to an overall dataset of 1,655,836.
- Job opportunities are particularly strong in high-demand sectors such as IT, engineering, and data analytics, with states like California and Texas offering the highest salaries and attracting the most applicants. Roles in software development and data science consistently command top compensation. For students, targeting industries like technology and finance, leveraging non-profit sponsorship options, and developing skills in programming and data analysis are strategic moves to enhance employability.
- Additionally, keeping abreast of the political climate is essential, as inclusive immigration policies could impact future visa processes. This analysis equips international students with actionable insights to navigate the H-1B landscape and optimize their job prospects in the U.S.



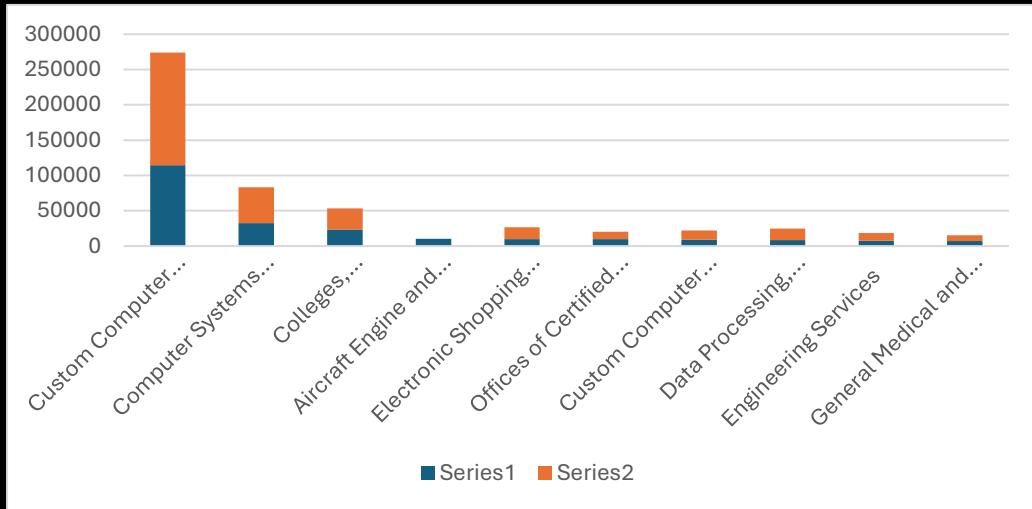
## Geographic Analysis

*\*Please click here to view the appendix*

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## Industry Classification (using NAICS code)

- Total available *distinct NAICS\* codes* in the given data are **124129**
- Below is the graph to depict the number of H1B applicants in the year **2022 vs 2024** for the top 10 industries.



- Series-1: 2022 and series -2: 2024

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## Employer Analysis

- Below is the list of top 10 organizations which have filled the highest number of requests for H1B visa.

Sr. no.	Employer Name	Number of Positions Requested	Industry
1	Amazon.Com Services Llc	130407	45411
2	Infosys Limited	119783	541511
3	Qualcomm Technologies, Inc.	60871	334220
4	Nvidia Corporation	41268	334111
5	Grandison Management, Inc.	39080	561320
6	Amazon Web Services, Inc.	33974	518210
7	Cisco Systems, Inc.	30758	334111
8	Servicenow, Inc.	24306	541511
9	Cognizant Technology Solutions Us Corp	22594	541512
10	Tata Consultancy Services Limited	20381	541511

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## Conclusion

- **Job Growth and Salary Trends:**
  - Job opportunities show growth, particularly in high-demand sectors such as IT, engineering, and data analytics.
  - Salaries vary significantly by state and industry, with tech hubs like California and New York offering the highest compensation packages.
- **Statistical Differences:**
  - Certain states, like California and Texas, dominate the H-1B visa market, attracting more applicants and offering higher salaries compared to others.
  - Analysis reveals that roles in software development and data science command the highest salaries, often exceeding industry averages.
- **Strategic Recommendations for Students:**
  - **Target Key Industries:** Focus on sectors like technology and finance, where job openings are plentiful, and salaries are competitive.
  - **Leverage Non-Profit Opportunities:** Non-profits can provide alternative sponsorship options, as they are exempt from H-1B caps.
  - **Develop In-Demand Skills:** Enhance your skill set in programming, data analysis, and cloud technologies to improve employability.
- **Political Climate and Immigration:**
  - Current political discussions suggest that parties favoring inclusive immigration policies may offer more support for visa processes in the future. Students should stay informed about evolving policies as they prepare for employment.
  - This analysis aims to equip international students with actionable insights to navigate the H-1B visa landscape effectively and maximize their employment opportunities in the U.S.

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## **Appendix**

- i. YTD – Year to Date
- ii. NAICS - North American Industry Classification System

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