TechTrends Visualizing Career Landscapes in Technology

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Analysis Problem

Many people are currently searching for jobs, whether they have been affected by recent layoffs or are fresh graduates. This search is especially crucial for international students who have a limited 90-day period after starting their Optional Practical Training (OPT) to secure employment. However, many individuals are feeling lost and uncertain about where to look for jobs and how to find ones that match their preferences.



Data

All the UNICORNS in the World

All the UNICORNS in the World (kaggle.com)

Company: The name of the unicorn company

Valuation (\$B): The valuation of the company, measured in billions of dollars, indicates.its market worth and financial standing

Date Joined: The date when the company attained unicorn status, signifying the milestone of achieving a valuation of over \$1 billion

Country: The country where the company is headquartered, representing its geographical location

City: The city within the country where the company's headquarters are situated, providing further insight into its operational base

Industry: The sector or industry in which the company operates, encompassing a diverse range of fields such as technology, finance, healthcare, and consumer goods

Tech stack

Development:

HTML

CSS

Javascript

D3.js

Python

Deployment:

Firebase

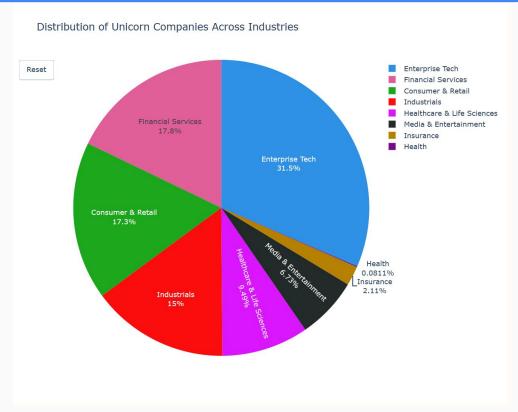
Collaboration:

Github

Microsoft Teams

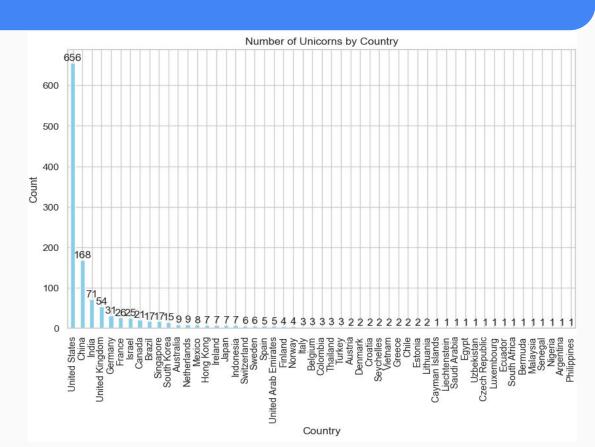
Pie Chart

The initial visualization provides a clear snapshot of unicorn companies distributed across various industries through a pie chart. This graphical representation allows us to quickly identify which industry holds the largest share among these unicorn companies. By observing the visualization, we can recognize that the Enterprise Tech sector claims the highest proportion at 31.5%, closely followed by Financial Services at 17.8%.



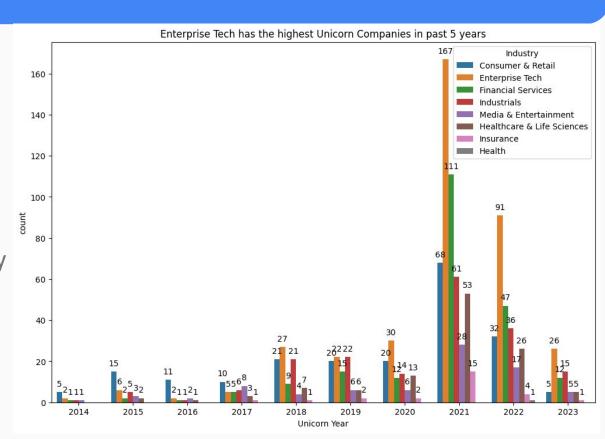
Bar Chart

In this visualization, we've constructed a bar graph to illustrate the total number of unicorn companies across different countries. The countries are represented on the x-axis, while the count of unicorn companies is depicted on the y-axis. It's evident from the graph that the United States leads with 656 unicorn companies, followed by China with 168 companies.



Multi-set Bar Chart

We utilized a Multi-set Bar Chart to gain deeper insights from the data, enabling us to visualize three key factors simultaneously: year, count, and industry. Through this visualization, we identified a prominent trend in the Enterprise Tech sector during the year 2021, followed closely by Financial Services. Additionally, we observed a consistent emergence of Enterprise Tech companies each year, with their numbers consistently surpassing those of other industries.



Scatter Plot

Through the Scatter Plot visualization, we've effectively mapped every data point into a single view. By hovering over any point on the plot, users can instantly access the name of the unicorn company and its corresponding valuation. This visualization is extremely helpful for users seeking to quickly assess the valuation of each unicorn company.



Bubble Map

We used a Bubble Map to display unicorn company locations worldwide. Each bubble represents a location, colored by industry and sized by company valuation. This helps users quickly identify regions with a high concentration of unicorn companies and understand valuation distribution.



Firebase

To make this application access simple to the user we already deployed the webpage on top of Firebase so user no need to work about requirements and how to run the code, he or she just needs to open the URL in their favorite web browser and all the visualizations and analysis will be no their fingertips



Demo

URL

dv-project2.web.app



The End