THE FUTURE OF WORK:
THE DATA ANALYSIS ON GLASSDOOR JOBS

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CONTENT

THE FUTURE OF WORK: THE DATA ANALYSIS ON GLASSDOOR JOBS

1 . INTRODUTION :

1.1 OVERVIEW:

Job analysis is a systematic procedure to analyse the requirements for the job role and job profile. Glassdoor is a website and online platform that provides information about jobs, salaries, and companies. Job analysis is a systematic approach to defining the job role, description, requirements, responsibilities, evaluation, etc. It helps in finding out the required level of education, skills, knowledge, training, etc for the job position. It also depicts the job worth i.e. measurable effectiveness of the job and contribution of job to the organization. Thus, it effectively contributes to setting up the compensation package for the job position.

Lack of analysis of Glassdoor jobs can result in limited understanding of job market trends, difficulty in finding relevant job opportunities, inability to attract and retain top talent, and lack of insight into company branding and reputation.

1.2 PURPOSE:

The purpose of this project is to conduct an analysis of Glassdoor job postings to gain insights into current and emerging job market trends, identify in-demand skills and experience, and understand how employers can improve their employer branding and reputation to attract and retain top talent.

2 . LITERATURE SURVEY:

2.1 Existing problem

➢ **Workplace Culture:** Complaints about a toxic or unhealthy work environment, lack of work-life balance, or issues with management styles.
➢ **Compensation and Benefits:** Employees may express dissatisfaction with their salary, bonuses, or benefits packages.
➢ **Career Growth Opportunities:** Concerns about limited opportunities for career advancement or professional development within the company.
➢ **Communication:** Issues related to poor communication from management, lack of transparency, or feeling uninformed about important company decisions.
➢ **Management:** Negative reviews about ineffective or unsupportive management, favoritism, or lack of recognition for good work.

- ➢ **Workload and Stress:** High workload, long hours, and stress-related problems may be mentioned.
- ➢ **Diversity and Inclusion:** Some reviews may highlight concerns about the lack of diversity and inclusivity in the workplace.

2.2 Proposed solution :

- ➢ **Anonymous Surveys for Employers:** Offer anonymous surveys for employers to collect feedback from their employees, which can help them understand concerns and make improvements.
- ➢ **Enhanced Reporting System:** Implement an enhanced reporting system to quickly identify and handle inappropriate or untruthful reviews, ensuring the platform remains fair and unbiased.
- ➢ **Inclusive Workplace Data:** Encourage companies to share data about their diversity and inclusion efforts to promote transparency and accountability.
- ➢ **Company Initiatives and Policies:** Include a section where companies can highlight their initiatives, policies, and efforts to address any issues raised in reviews.
- ➢ **User Education:** Educate users about the importance of providing constructive and factual feedback to maintain the integrity of the platform.

3 .THEORITICAL ANALYSIS :

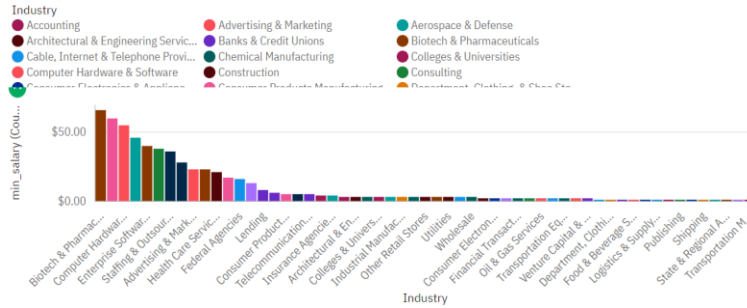## 3.1 Block diagram :
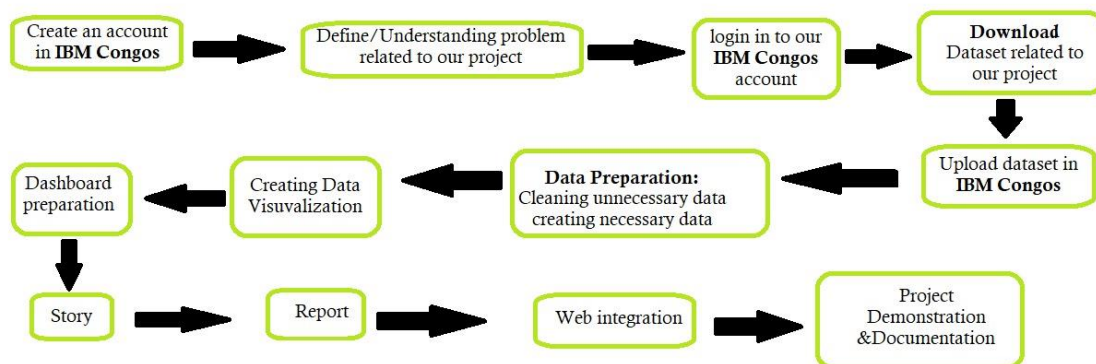
3.2 HARDWARE USED:
LAPTOP, MOBILE PHONE

SOFTWARE USED:
IBM CONGNOS, ANACONDA, PYTHON

4 . RESULT :

VISUALIZATIONS

min_salary by Industry colored by Industry

Industry
- Accounting
- Advertising & Marketing
- Aerospace & Defense
- Architectural & Engineering Servic...
- Banks & Credit Unions
- Biotech & Pharmaceuticals
- Cable, Internet & Telephone Provi...
- Chemical Manufacturing
- Colleges & Universities
- Computer Hardware & Software
- Construction
- Consulting
- Consumer Electronics & Appliances
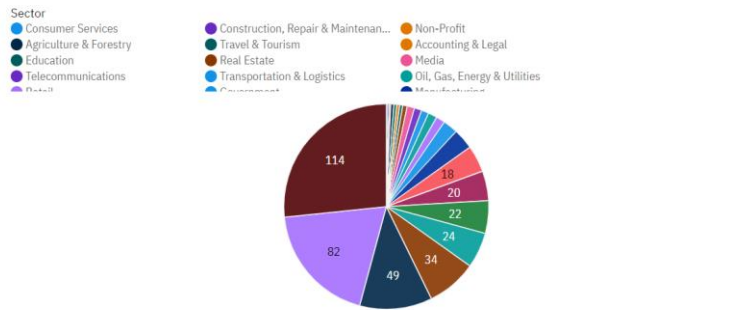- Consumer Products Manufacturing
- Department, Clothing, & Shoe Sto

Details

The total number of results for **min_salary**, across all **industries**, is 589.

Biotech & Pharmaceuticals (11.2 %), IT Services (10.2 %), and Computer Hardware & Software (9.3 %) are the most frequently occurring categories of **Industry** with a combined count of 181 items with **min_salary** values (30.7 % of the total).

Company Name by Sector

Sector
- Consumer Services
- Construction, Repair & Maintenan...
- Non-Profit
- Agriculture & Forestry
- Travel & Tourism
- Accounting & Legal
- Education
- Real Estate
- Media
- Telecommunications
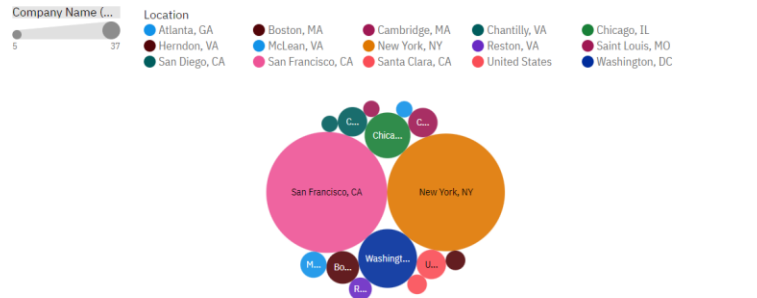- Transportation & Logistics
- Oil, Gas, Energy & Utilities

Details

The total number of results for **Company Name**, across all **sectors**, is 660.

Information Technology is the most frequently occurring category of **Sector** with a count of 178 items with **Company Name** values (27 % of the total).

Location colored by Location sized by Company Name

Company Name (...
5   37

Location
- Atlanta, GA
- Boston, MA
- Cambridge, MA
- Chantilly, VA
- Chicago, IL
- Herndon, VA
- McLean, VA
- New York, NY
- Reston, VA
- Saint Louis, MO
- San Diego, CA
- San Francisco, CA
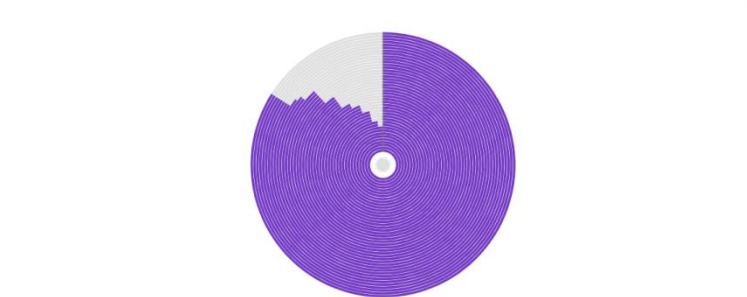- Santa Clara, CA
- United States
- Washington, DC

Details

The overall number of results for **Company Name** is 303.

San Francisco, CA (22.8 %) and New York, NY (16.5 %) are the most frequently occurring categories of **Location** with a combined count of 119 items with **Company Name** values (39.3 % of the total).
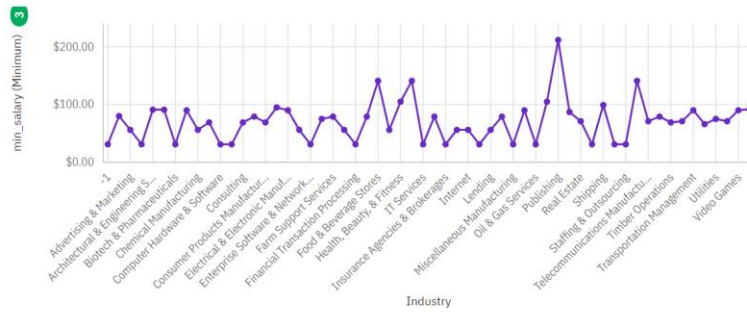
Rating by Job Title

Details

Over all **job titles**, the average of **Rating** is 4.6.

The average values of **Rating** range from 4.2, occurring when **Job Title** is Computational Behavioral Scientist, to 5, when **Job Title** is Applied AI Scientist / Engineer.

Senior Data Engineer is the most frequently occurring category of **Job Title** with a count of 5 items with **Rating** values (6.8 % of the total).
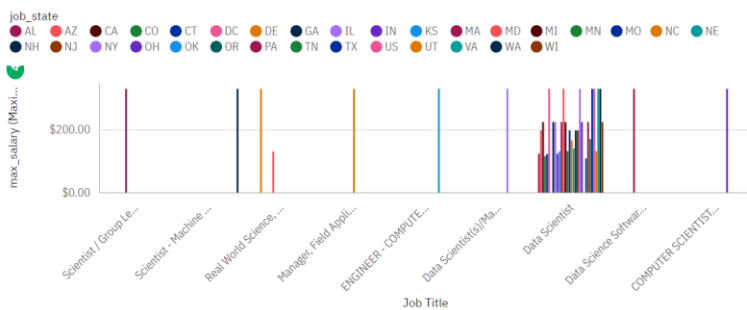
min_salary by Industry

min_salary (Minimum)

$200.00
$100.00
$0.00

Industry

Advertising & Marketing, Architectural & Engineering S..., Biotech & Pharmaceuticals, Chemical Manufacturing, Computer Hardware & Software, Consulting, Consumer Products Manufactur..., Electrical & Electronic Manuf..., Enterprise Software & Network..., Farm Support Services, Financial Transaction Processing, Food & Beverage Stores, Health, Beauty, & Fitness, IT Services, Insurance Agencies & Brokerages, Internet, Lending, Miscellaneous Manufacturing, Oil & Gas Services, Publishing, Real Estate, Shipping, Staffing & Outsourcing, Telecommunications Manufactu..., Timber Operations, Transportation Management, Utilities, Video Games

Details

The total number of results for **min_salary**, across all **industries**, is 660.

The smallest value of **min_salary** is 31, occurring when **Industry** is -1.

-1 (10.8 %), Biotech & Pharmaceuticals (10 %), IT Services (9.1 %), and Computer Hardware & Software (8.3 %) are the most frequently occurring categories of **Industry** with a combined count of 252 items with **min_salary** values (38.2 % of the total).

max_salary by Job Title colored by job_state

job_state
AL AZ CA CO CT DC DE GA IL IN KS MA MD MI MN MO NC NE
NH NJ NY OH OK OR PA TN TX US UT VA WA WI

max_salary (Maxi...)

$200.00
$0.00

Job Title

Scientist / Group Le..., Scientist - Machine ..., Real World Science, ..., Manager, Field Appli..., ENGINEER - COMPUTE..., Data Scientist(s)/Ma..., Data Scientist, Data Science Softwar..., COMPUTER SCIENTIST...
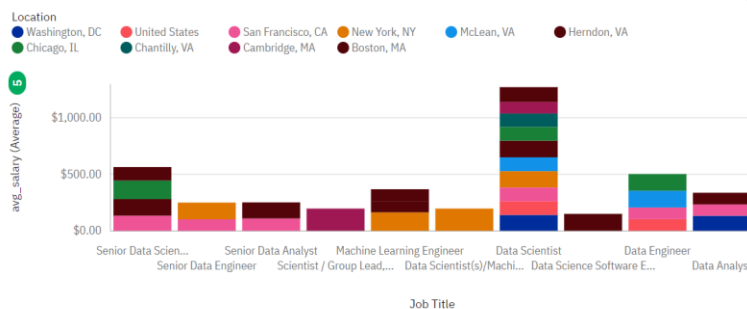
Details

The total number of results for **max_salary**, across all **job titles**, is 39.

The largest value of **max_salary** is 331 and occurs in Data Scientist and DC.

Data Scientist is the most frequently occurring category of **Job Title** with a count of 30 items with **max_salary** values (76.9 % of the total).

MA is the most frequently occurring category of **job_state** with a count of 3 items with **max_salary** values (7.7 % of the total).

avg_salary by Job Title colored by Location

Location
Washington, DC United States San Francisco, CA New York, NY McLean, VA Herndon, VA
Chicago, IL Chantilly, VA Cambridge, MA Boston, MA

avg_salary (Average)

$1,000.00
$500.00
$0.00

Job Title

Senior Data Scien..., Senior Data Engineer, Senior Data Analyst, Machine Learning Engineer, Scientist / Group Lead,..., Data Scientist(s)/Machi..., Data Scientist, Data Science Software E..., Data Engineer, Data Analyst
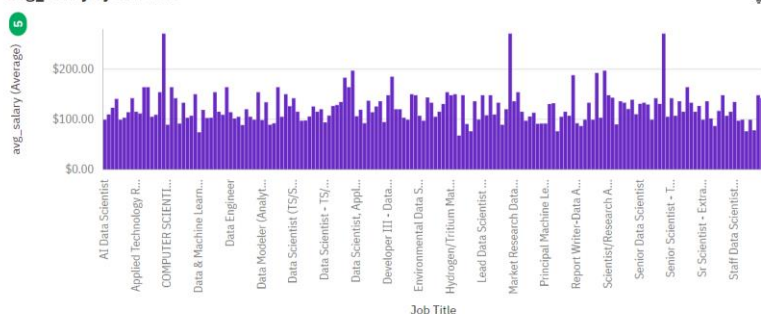
Details

Over all **job titles** and **locations**, the average of **avg_salary** is 130.1.

The average values of **avg_salary** range from 99 to 197.

Data Scientist is the most frequently occurring category of **Job Title** with a count of 157 items with **avg_salary** values (78.5 % of the total).

San Francisco, CA is the most frequently occurring category of **Location** with a count of 58 items with **avg_salary** values (29 % of the total).

avg_salary by Job Title

avg_salary (Average)

$200.00
$100.00
$0.00

Job Title

AI Data Scientist, Applied Technology R..., COMPUTER SCIENTI..., Data & Machine Learn..., Data Engineer, Data Modeler (Analyt..., Data Scientist (TS/S..., Data Scientist - TS/..., Data Scientist, Appli..., Developer III - Data..., Environmental Data S..., Hydrogen/Tritium Mat..., Lead Data Scientist..., Market Research Data..., Principal Machine Le..., Report Writer-Data A..., Scientist/Research A..., Senior Data Scientist, Senior Scientist - T..., Sr Scientist - Extra..., Staff Data Scientist...
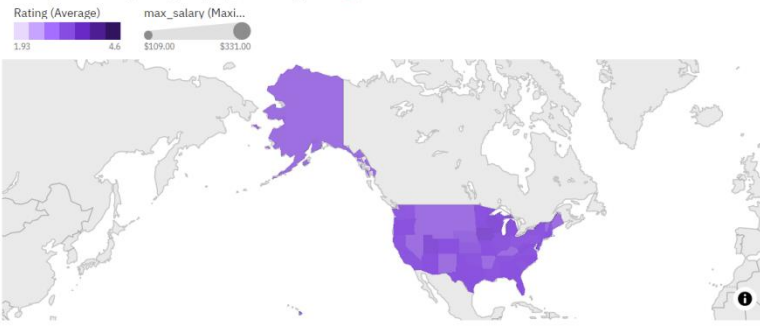
Details

Over all **job titles**, the average of **avg_salary** is 123.6.

The average values of **avg_salary** range from 67.5, occurring when **Job Title** is In-Line Inspection Data Analyst, to 271, when **Job Title** is COMPUTER SCIENTIST - ENGINEER - RESEARCH COMPUTER SCIENTIST - SIGNAL PROCESSING.

avg_salary is unusually high when **Job Title** is COMPUTER SCIENTIST - ENGINEER - RESEARCH COMPUTER SCIENTIST - SIGNAL PROCESSING, Manager, Field Application Scientist, Southeast and Senior Principal Data Scientist (Python/R).

Rating and max_salary for job_state regions 4

Rating (Average)
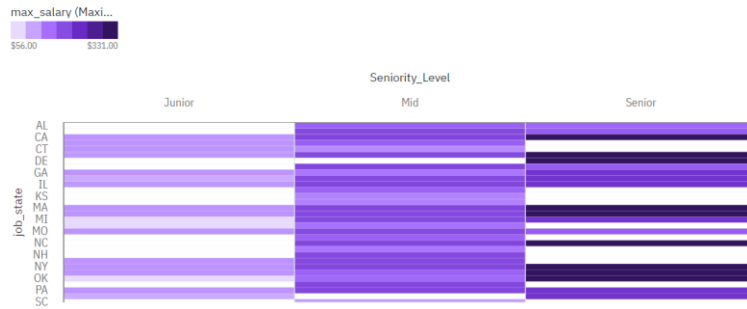1.93   4.6

max_salary (Maxi...
$109.00 $331.00

Details

Over all values of **job_state**, the average of **Rating** is 3.587.

The average values of **Rating** range from 1.933, occurring when **job_state** is NE, to 4.6, when **job_state** is IA.

CA is the most frequently occurring category of **job_state** with a count of 165 items with **Rating** values (25 % of the total).

max_salary by job_state and Seniority_Level 4

max_salary (Maxi...
$56.00 $331.00

Seniority_Level

Junior	Mid	Senior

job_state: AL, CA, CT, DE, GA, IL, KS, MA, MI, MO, NC, NH, NY, OK, PA, SC

Details

The largest value of **max_salary** is 331 and occurs in CA and Senior.

The total number of results for **max_salary**, across all **job_state**, is 660.

CA is the most frequently occurring category of **job_state** with a count of 165 items with **max_salary** values (25 % of the total).

Mid is the most frequently occurring category of **Seniority_Level** with a count of 467 items with **max_salary** values (70.8 % of the total).

Sector colored by Sector sized by Company Name

Company Name (...
1   114

Sector
- Accounting & Legal
- Aerospace & Defense
- Agriculture & Forestry
- Biotech & Pharmaceuticals
- Business Services
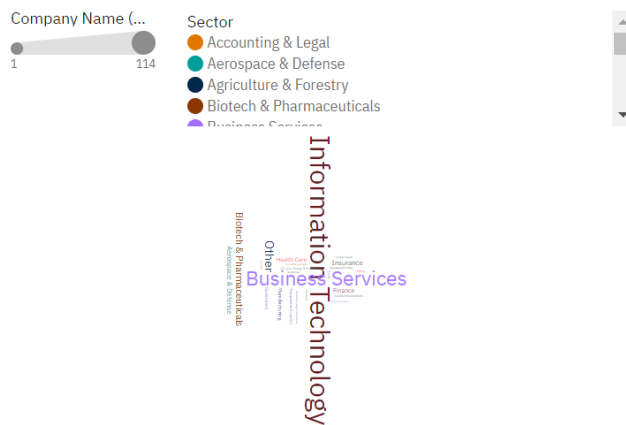
Details

The overall number of results for **Company Name** is 660.

Information Technology is the most frequently occurring category of **Sector** with a count of 178 items with **Company Name** values (27 % of the total).

Company Name by Type of ownership colored by Type of ownership

Type of ownership
- College / University
- Company - Public
- Government
- Nonprofit Organization
- Company - Private
- Contract
- Hospital
- Other Organization

Company Nam...

400 — 386
200 — 152
0 —   36 28 10   5   4   4   3   2   2   1

Company - Private
Company - Public
Nonprofit Organ...
Subsidiary or B...
Government
Other Organization
Private Practic...
Unknown
College / Unive...
Contract
Self-employed
Hospital
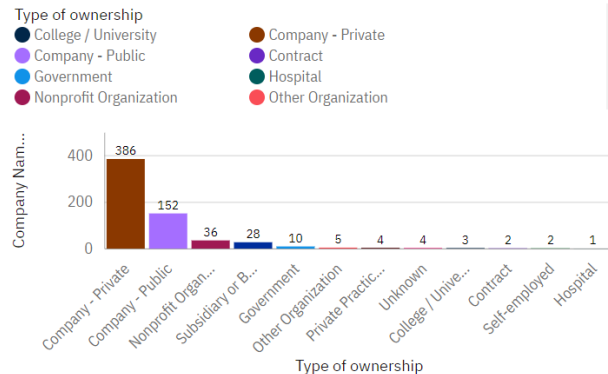
Type of ownership

Details

The total number of results for **Company Name**, across all **Type of ownership**, is 633.

Company - Private is the most frequently occurring category of **Type of ownership** with a count of 386 items with **Company Name** values (61 % of the total).

Selected sources /

Job data module - Jobs e...   +   ⋮

🔍 Search

- 📁 Navigation paths   +
- ▾ ⊞ Cleaned_...obs.csv
  - ▸ abc Job Title
  - ▸ abc Salary Estimate
  - ▸ abc Job Description
  - 📏 Rating
  - ▸ abc Company Name
  - ▸ abc Location
  - ▸ abc Headquarters
  - ▸ abc Size
  - ▸ abc Type of...nership
  - ▸ abc Industry

DASHBOARD
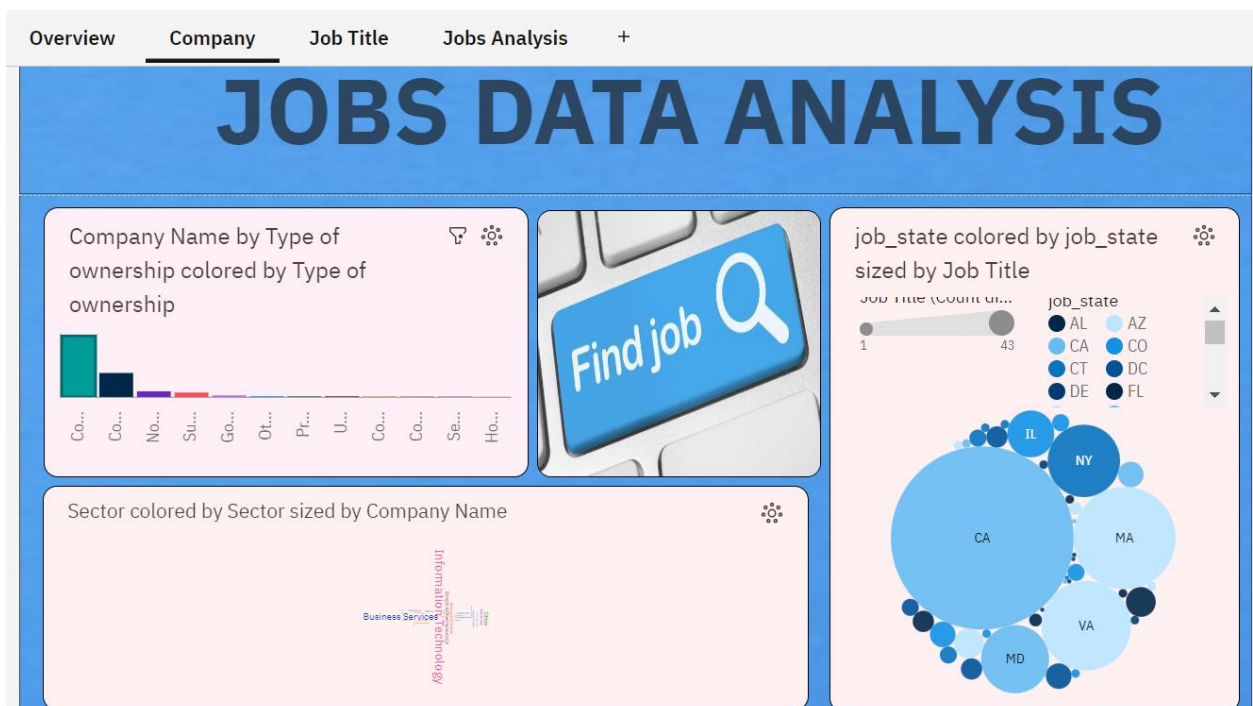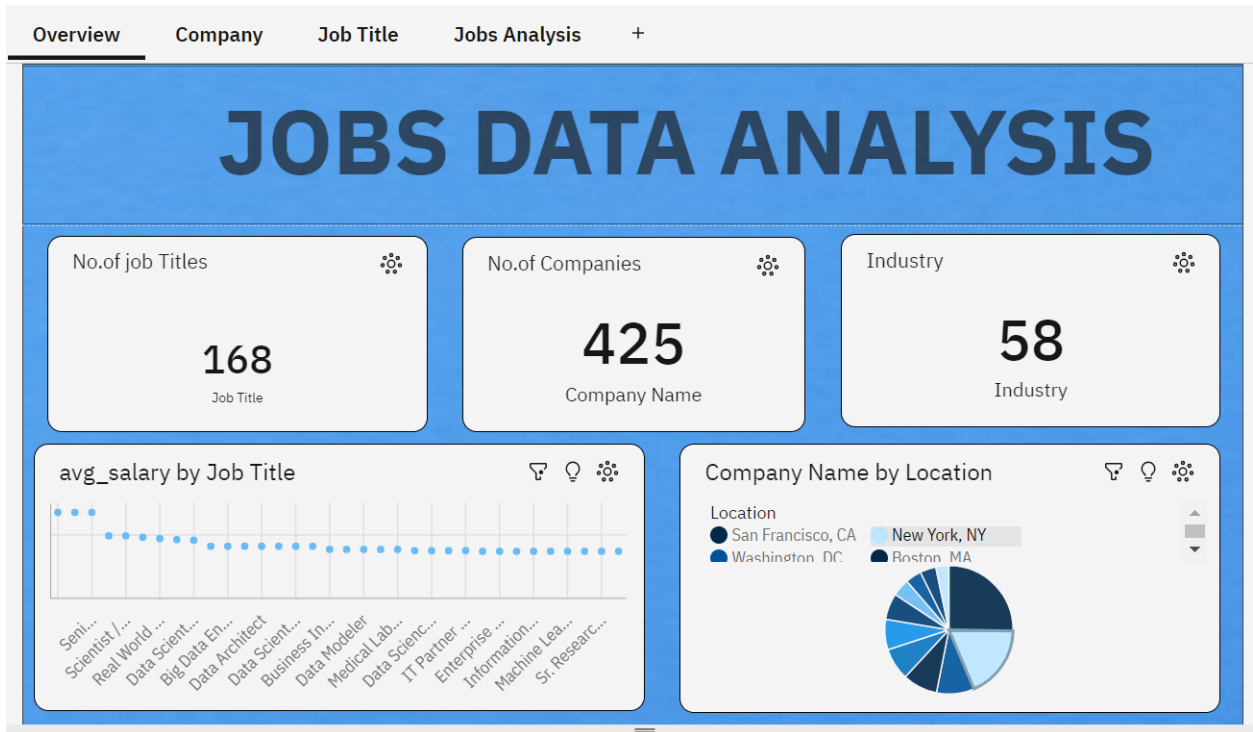
JOBS DATA ANALYSIS

job_state colored by
job_state sized by Job
Title
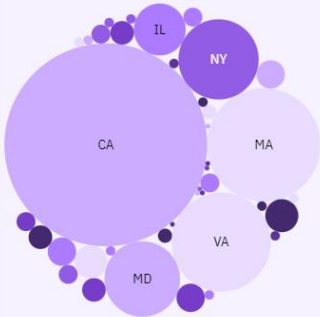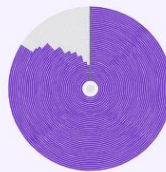
Industry hierarchy colored by Industry
and sized by Job Title

Biotech & Pharmace...	Enterpris...	Adverti...	Health ...	IT Ser...

Internet | -1 | Staff... | Ba... | Le...

Computer Hardware... | Research & ... | Co... En... In... Te... Vi...

Investment ... | Ch... R... U...

Insurance Carriers | Col...

Consulting | Ele...

Aerospace & Defense | Foo...

Federal Age... | Ins...

Rating by Job Title
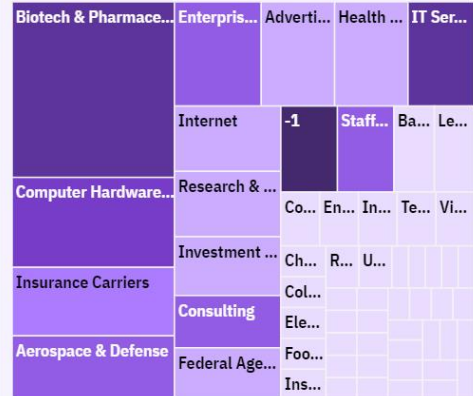
JOBS DATA ANALYSIS

avg_salary by Job Title colored by Location

Location
- San Francisco, CA
- Reston, VA
- Maple Plain, MN
- Herndon, VA
- Fort Worth, TX
- Fort Belvoir, VA

enior Data A...   Senior Business In...   Health Plan Data A...   Data Analyst   Analyti...
Senior Data Analyst   Intelligence Data ...   Data Analyst - Uni...
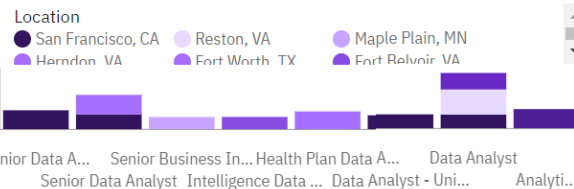
job_simp and Job Title

job_simp	Job Title
	Analytics - Business Assuran...
	Business Data Analyst
analyst	Business Intelligence Analyst

max_salary by Job Title colored by job_state

job_state
- CA
- DC
- IA
- IN
- MA
- MD
- VA
- WA

Data Analyst

Analytics - Business Assurance Data A...

min_salary by Industry

Banks &... Computer... Consumer... Health C... Industri... Insuranc... Investme... Miscella... Research... Staffing... Video G...

STORY

REPORT

Glassdoor Jobs Data Report

Which state is offering highest salary in particular domain

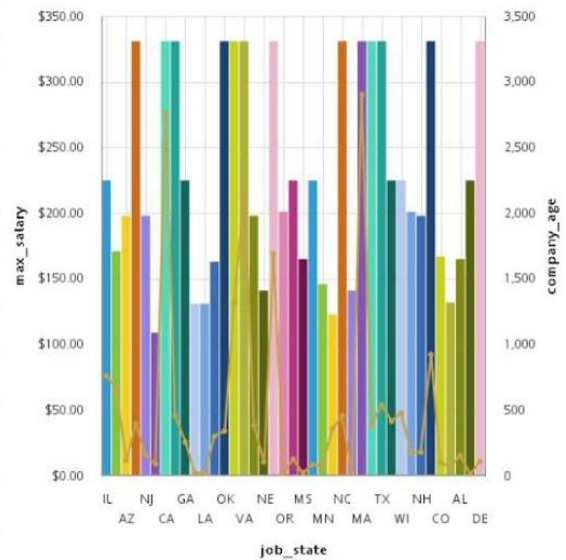max_salary

$97.00 $331.00
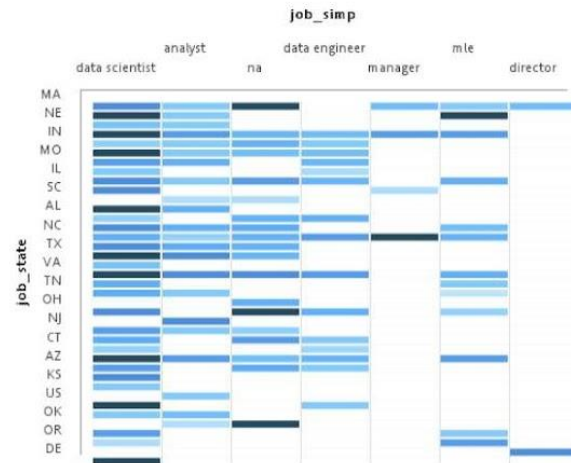
Salary range for different job categories
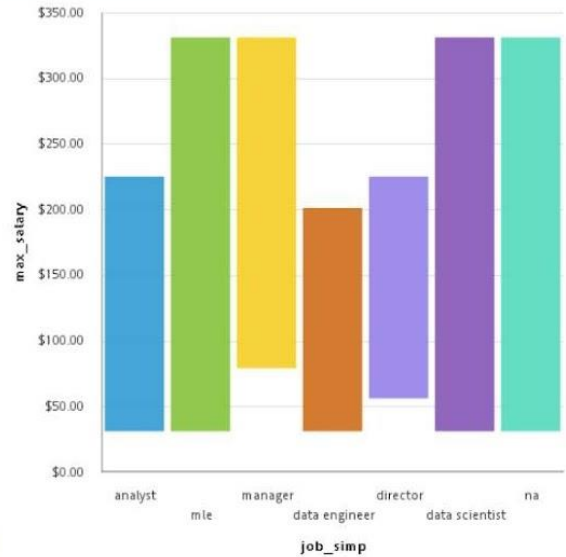
Analyzing skills on the basis of different job title

	python	big_data	tableau	aws	spark	hadoop
Data Modeler	1	0	1	0	0	0
Data Scientist/Machine Learning	2	2	0	0	2	2
Data Analyst	9	1	7	0	1	1
Data Analyst I	0	0	0	0	0	0
Computational Scientist, Machine Learning	1	0	0	1	0	0
Product Data Scientist - Ads Data Science	2	0	0	0	0	0
Data Scientist - Intermediate	2	0	0	0	0	0
Global Data Analyst	0	0	1	0	0	0
Data & Machine Learning Scientist	2	0	0	2	0	0
Data Engineer (Remote)	1	0	0	1	1	1
Data Scientist, Applied Machine Learning - Bay Area	2	0	0	2	0	0
Purification Scientist	0	0	0	0	0	0
Data Scientist 3 (718)	2	0	0	2	0	0
Real World Science,	2	0	0	0	0	2

Max salary offered by companies at particular location in accordance with company age

WEB INTEGRATION

GLASSDOOR JOBS ANALYSIS

Home About Dashboard Story Report Contact
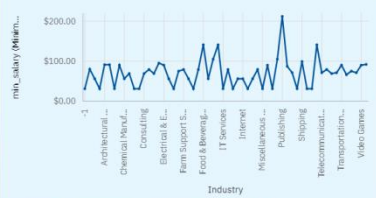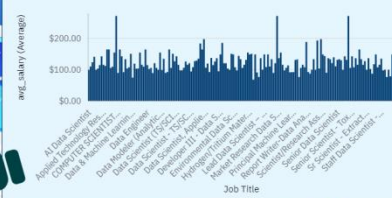
Glassdoor Jobs Story

min_salary by Industry

avg_salary by Job Title

Salary trend as per the market standards

GLASSDOOR JOBS ANALYSIS

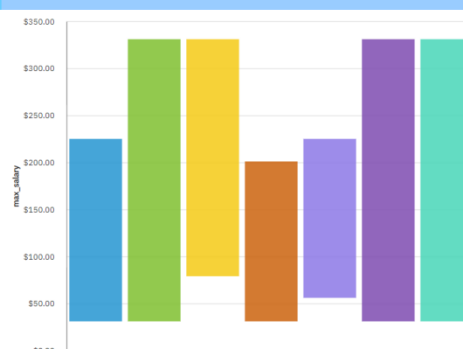Home About Dashboard Story Report Contact

REPORT

Glassdoor Jobs Data Report

Which state is offering highest salary in particular domain

Salary range for different job categories

max_salary

$97.00 $331.00

job_simp

data scientist   analyst   na   data engineer   manager   mle   director

GLASSDOOR JOBS ANALYSIS

Home About Dashboard Story Report Contact

job_simp

analyst   mle   manager   data engineer   director   data scientist   na

Analyzing skills on the basis of different job title

Max salary offered by companies at particular location in accordance with company age

	python	big_data	tableau	aws	spark	hadoop	excel
Data Modeler	1	0	1	0	0	0	1
Data Scientist/Machine Learning	2	2	0	0	2	2	0
Data Analyst	9	1	7	0	1	1	10
Data Analyst I	0	0	0	0	0	0	0
Computational Scientist, Machine Learning	1	0	0	1	0	0	1
Product Data Scientist - Ads Data Science	2	0	0	0	0	0	0
Data Scientist - Intermediate	2	0	0	0	0	0	2
Global Data Analyst	0	0	0	0	0	0	1
Data & Machine Learning	0	0	0	0	2	0	0

⇞ Top   ↑ Page up   ↓ Page down   ⇟ Bottom
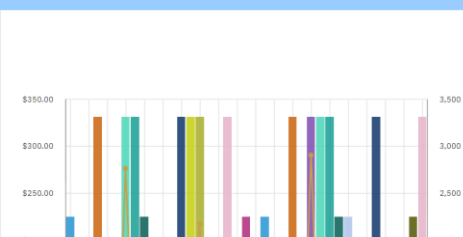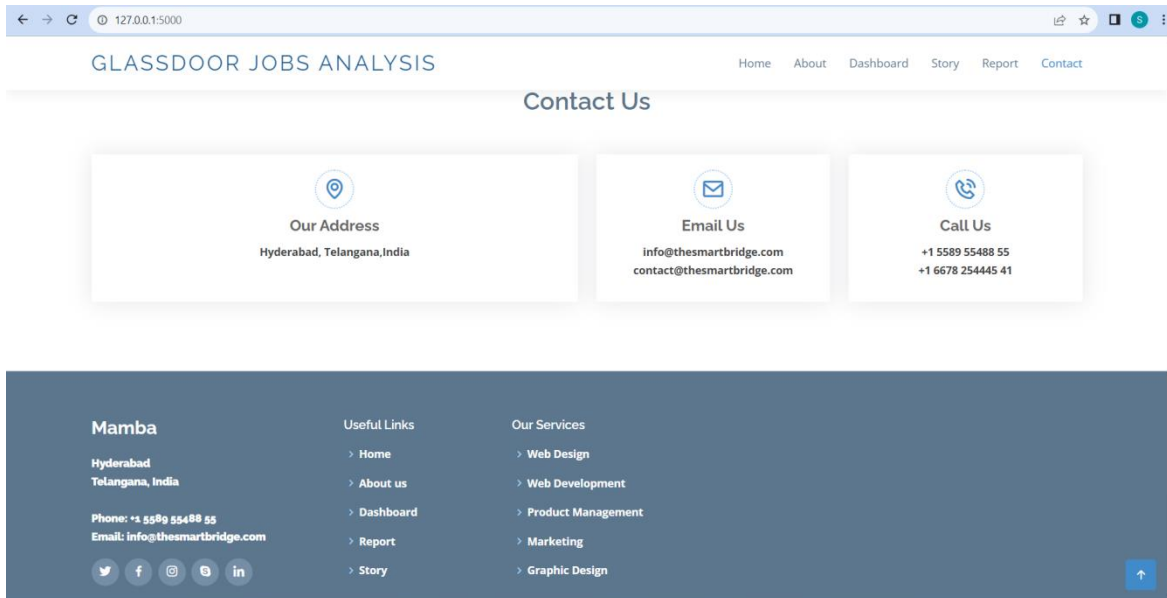
5. ADVANTAGES:

> **Job Listings**: Glassdoor aggregates job postings from various sources, making it a convenient platform for job seekers to find and apply for relevant positions across different industries and locations.

> **Job Market Research**: Glassdoor provides access to job market trends and hiring patterns, helping job seekers stay updated on industry developments and opportunities.

> **Recruitment Marketing**: Employers can use Glassdoor as a recruitment marketing platform to advertise their job openings, attracting a diverse pool of candidates actively seeking new opportunities.

> **Data-Driven Decision Making:** Glassdoor's data and insights can help employers make data-driven decisions related to compensation, benefits, and other employee-related matters.

DISADVANTAGES:

> **Influence of a Single Review:** A single extremely positive or negative review can significantly impact a company's overall rating, which might not reflect the collective employee sentiment accurately.

> **Paywall for Some Features:** While Glassdoor offers valuable information for free, some advanced features and insights may require a paid subscription, limiting access to certain users.

> **Recruitment Challenges:** Negative reviews and low ratings may deter potential candidates from applying to the company, making it more difficult to attract top talent.

> **Negative Reviews Impact:** Negative reviews on Glassdoor can harm a company's reputation and employer brand. Responding to negative reviews may not always be sufficient to mitigate the damage.

6 . APPLICATION:

- **Salary Negotiation:** Job candidates can use salary information from Glassdoor to negotiate better compensation packages during the hiring process.
- **Diversity and Inclusion Insights:** Glassdoor provides diversity and inclusion statistics for some companies, allowing job seekers to evaluate a company's commitment to diversity.
- **Recruitment Marketing:** Companies can use Glassdoor as a recruitment marketing platform to advertise job openings and attract talent actively seeking new opportunities.
- **Industry Insights:** Glassdoor can offer valuable industry trends and insights, helping users stay updated on changes and developments in their field of interest.

7 . CONCLUSION:

The future work for the data analysis of the Glassdoor jobs project holds promising opportunities for further exploration and improvement. With the wealth of data available on the platform, there are several areas that can be focused on to enhance the analysis and provide more valuable insights.Incorporating machine learning algorithms and natural language processing techniques can help in extracting deeper insights from the job descriptions and reviews. By analyzing the language used and identifying patterns, it is possible to gain a better understanding of the skills and qualifications required for different positions, as well as the overall sentiment associated with certain companies or industries.

Visualizing the data in meaningful and interactive ways can improve the usability and accessibility of the insights generated from the analysis. This can involve creating dashboards, interactive charts, or heat maps to enable users to explore the data and gain insights at a glance.

Overall, the future work for the data analysis of the Glassdoor jobs project holds immense potential in terms of uncovering valuable insights, providing actionable recommendations, and empowering job seekers and companies alike. By leveraging advanced analytical techniques and continuously improving the data analysis pipeline, the project can contribute to enhancing transparency and efficiency in the job market.

8 . FUTURE SCOPE:

The future scope of the data analysis of Glassdoor jobs holds immense potential and can be pursued in several directions. Here are some key areas that can be focused on:

- **Predictive Analytics**
- **Recommender Systems**
- **Sentiment Analysis**
- **Diversity and Inclusion Analysis**
- **Skill Gap Analysis**
- **Geographical Analysis**
- **Social and Network Analysis**

Overall, the future work of data analysis of Glassdoor jobs offers numerous possibilities for enhancing the job search experience, improving transparency in the job market, promoting diversity and inclusion, and enabling data-driven decision-making for both job seekers and employers. By exploring these areas, it is possible to unlock valuable insights that can transform the way people find and evaluate job opportunities.