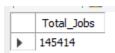
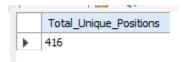
# **Global Technology Salary Project**

### I. Overview Summary

1. What is the total number of jobs?



- ⇒ Showing that the dataset encompasses a large-scale view of the technology job market, with a total of **145,414 recorded job entries** worldwide.
  - 2. What is the total number of unique positions?



- ⇒ Showing that these jobs span **416 unique positions**, reflecting a wide diversity of roles within the technology industry.
  - 3. What are all the unique positions in the dataset?



- ⇒ Showing that the unique positions range from technical roles such as **Data Engineer**, **Machine Learning Engineer**, **and Software Developer** to leadership roles like **Head of Data** and **Director**, highlighting opportunities across different career levels.
  - 4. How many jobs exist by work type (remote, on-site, hybrid)?

		-
	work_type	Total_Jobs
•	On-site	114863
	Remote	30223
	Hybrid	328

⇒ Showing that on-site roles dominate the market with 114,863 jobs, compared to 30,223 remote and 328 hybrid positions.

5. How many jobs exist by employment type (full-time, part-time, contract, and freelance)?

	employment type	Total Jobs
	Full-time	144544
ŕ	Contract	445
	Part-time	409
	Freelance	16

 $\Rightarrow$  Showing that the vast majority of positions (144,544) are full-time, with contract (445), part-time (409), and freelance (16) roles making up a very small share of opportunities.

6. How many jobs exist by experience level (Entry-level, Mid-level, Senior-level, Director)?

	experience_level	Total_Jobs
•	Senior-level	84157
	Mid-level	44060
	Entry-level	13434
	Director	3763

 $\Rightarrow$  Showing that senior-level roles are most prevalent (84,157 jobs), followed by mid-level (44,060), entry-level (13,434), and director positions (3,763).

7. How many jobs exist by company size (Small, Medium, Large)?

	company_size	Total_Jobs
•	Medium	141378
	Large	3819
	Small	217

⇒ Showing that medium-sized companies dominate the job market with **141,378 jobs**, while large companies account for **3,819** and small companies for only **217**.

8. What are the top 10 countries with the most number of jobs (based on company location)?

	company_location	Total_Jobs
•	United States	130222
	Canada	5892
	United Kingdom	4037
	Australia	564
	Netherlands	458
	Germany	435
	France	411
	Lithuania	362
	Austria	345
	Spain	293

⇒ Showing that the United States leads significantly with 130,222 jobs, followed by Canada (5,892) and the United Kingdom (4,037), with other countries like Australia, Netherlands, and Germany having fewer than 600 jobs each.

9. What are the top 10 most common job titles?

jobs	Total_Jobs
Data Scientist	18235
Software Engineer	16328
Data Engineer	15873
Data Analyst	13369
Engineer	10478
Machine Learning Engineer	8659
Manager	7415
Analyst	5024
Research Scientist	3364
Product Manager	2462

⇒ Showing that "Data Scientist" leads as the most common job title with **18,235 jobs**, followed by "Software Engineer" (**16,328**) and "Data Engineer" (**15,873**), while roles like "Product Manager" rank lower with **2,462 jobs**.

## II. Salary Analysis

1. What is the average salary across all jobs?

	Average_Salary
•	157498

 $\Rightarrow$  Showing that the overall average salary across all jobs is \$157,498.

2. What is the average salary by experience level?

experience_Level	Average_Salary
Director	202356
Senior-level	172620
Mid-level	142635
Entry-level	98950

- ⇒ Showing that Directors earn the highest average salary at \$203,256, followed by Senior-level positions (\$172,260), Mid-level (\$142,635), and Entry-level roles (\$98,950).
  - 3. What is the average salary by company size?

company_size	Average_Salary
Large	159093
Medium	157562
Small	87835

- ⇒ Showing that large companies offer the highest average salary at \$159,093, followed by medium-sized companies (\$157,562), while small companies pay significantly less (\$87,335).
  - 4. What are the top 10 highest-paying job titles (by average salary)?

jobs	Average_Salary
Research Team Lead	450000
Analytics Engineering Manager	399880
Data Science Tech Lead	375000
Applied AI ML Lead	292500
IT Enterprise Data Architect	284090
Head of Applied AI	273875
Director of Data	270000
Head of Machine Learning	266430
AIRS Solutions Specialist	263250
Machine Learning Performance Engineer	262500

- ⇒ Showing that "Research Team Lead" ranks as the highest-paying job title with an average salary of \$450,000, followed by "Analytics Engineering Manager" (\$399,880) and "Data Science Tech Lead" (\$375,000).
  - 5. What is the most common salary bucket for each job title?

jobs	salary_bucket	Total_Jobs
Data Scientist	120K-250K	11203
Software Engineer	120K-250K	10813
Data Engineer	120K-250K	9391
Data Analyst	60K - 120K	7439
Engineer	120K-250K	6207
Machine Learning Engineer	120K-250K	5819
Manager	120K-250K	4624
Analyst	60K - 120K	2850
Research Scientist	120K-250K	2157
Product Manager	120K-250K	1619
Applied Scientist	120K-250K	1592
Data Architect	120K-250K	1387
Analytics Engineer	120K-250K	1316

⇒ Showing that the most common salary bucket for most high-demand tech roles is \$120K-\$250K, with "Data Scientist" leading at 11,203 jobs in this range, followed by "Software Engineer" (10,813) and "Data Engineer" (9,391).

6. Which job titles are most likely to be remote and highly paid?

jobs	Total_Jobs	Average_Remote_Salary
Head of AI	12	254750
Enterprise Account Executive	6	253167
Director of Product Management	6	247375
Executive	14	240989
Machine Learning Software Engineer	5	240440
Engineering Manager	176	234581
Head of Data	72	227330
Data Analysis	10	215190
System Engineer	6	204967
Director	138	200902

⇒ Showing that "Head of AI" commands the highest remote average salary at \$254,750, followed by "Enterprise Account Executive" (\$253,167) and "Director of Product Management" (\$247,375), indicating these roles are both highly paid and remote-friendly.

7. Which top 10 job titles are paid below average in most countries?

jobs	Total_Jobs
Data Analyst	11730
Data Scientist	10361
Data Engineer	9589
Software Engineer	6115
Engineer	5295
Analyst	4269
Manager	3851
Machine Learning Engineer	2807
Associate	1649
Analytics Engineer	1238

⇒ Showing that common roles such as "Data Analyst" (11,730 jobs), "Data Scientist" (10,361), and "Data Engineer" (9,589) rank among the top job titles paid below the overall average in most countries, highlighting a global pay gap for these positions.

8. Which job titles show the largest difference in salary between company size categories?

jobs	salary_difference_large_vs_small
Product Designer	216973
Head of Data	136272
AI Researcher	112111
Applied Machine Learning Scientist	100831
Research Scientist	92694
Analytics Engineer	92262
Manager Data Management	88986
Data Engineer	82187
AI Scientist	81078
Machine Learning Engineer	73176

⇒ Showing that "Product Designer" has the largest salary gap between large and small companies at \$216,973, followed by "Head of Data" (\$136,272) and "AI Researcher" (\$112,111), suggesting that company size plays a significant role in pay differences for these roles.

#### III. Time Trends & Growth

1. What is the year-over-year salary growth for each job title?

Jobs	Work_Year	Average_Salary	Prev_Year_Salary	Salary_Change
Actuarial Analyst	2025	91800	91333	467
Admin & Data Analyst	2023	50000	60000	-10000
Admin & Data Analyst	2024	79074	50000	29074
Admin & Data Analyst	2025	52000	79074	-27074
AI Architect	2023	250328	180000	70328
AI Architect	2024	212573	250328	-37755
AI Architect	2025	204310	212573	-8263
AI Data Engineer	2025	100000	88888	11112
AI Data Scientist	2025	139000	61381	77619
AI Developer	2023	133267	275000	-141733
AI Developer	2024	164920	133267	31653
AI Developer	2025	148263	164920	-16657
AI Engineer	2023	161488	107093	54395

⇒ Showing that roles such as "AI Architect" saw a major year-over-year salary increase in 2025 (+\$70,328), while others like "AI Developer" in 2023 experienced a substantial drop (-\$141,733), indicating varying market demand and pay volatility across job titles.

2. Which 10 job titles had the biggest salary change across years?

jobs	salary_change
Data Analytics Lead	315989
Head of Machine Learning	257691
Computer Vision Engineer	184324
Applied Machine Learning Scientist	170090
AI Scientist	166535
Software Development Engineer	164354
Research Scientist	162996
Machine Learning Infrastructure Engineer	153094
Staff Data Analyst	150122
Deep Learning Engineer	147701

⇒ Showing that "Data Analytics Lead" experienced the highest salary change across years (+\$315,989), followed by "Head of Machine Learning" (+\$257,691) and "Computer Vision Engineer" (+\$184,324), highlighting the growing market value for advanced data and AI leadership roles.

3. Which job titles have consistently increased in salary every year?

	jobs
٠	AI Engineer
	AI Programmer
	AI Research Engineer
	AI Scientist
	Applied Scientist
	BI Analyst
	Big Data Engineer
	Business Data Analyst
	Business Intelligence Developer
	Computer Vision Engineer
	Data Analyst
	Data Analytics Consultant
	Data Analytics Manager

⇒ Showing that roles like "AI Engineer," "AI Scientist," and "Data Analytics Manager" have consistently increased in salary every year, indicating sustained and rising demand in these positions across the industry.

## 4. What are the top 3 highest-paid jobs in each year?

Jobs	Work_Year	Annual_Salary	salary_rank
Software Engineer	2025	800000	1
Architect	2025	800000	1
Data Engineer	2025	793136	3
Data Engineer	2025	793136	3
AI Architect	2024	800000	1
Data Analyst	2024	774000	2
Analytics Engineer	2024	750000	3
Machine Learning Scientist	2024	750000	3
Data Analyst	2024	750000	3
Machine Learning Scientist	2024	750000	3
Data Scientist	2024	750000	3
Machine Learning Scientist	2023	750000	1
Machine Learning Engineer	2023	750000	1

⇒ Showing that "Software Engineer" and "Architect" lead the highest-paid roles in 2025 with salaries reaching \$800,000, while "AI Architect" in 2024 and "Machine Learning Engineer" in 2023 also dominate the top ranks, reflecting the premium for specialized tech expertise.

5. What are the fastest growing job titles over the years (based on job count)?

jobs	work_Year	previous_total_jobs	total_jobs	growth
Data Scientist	2024	1925	8932	7007
Data Engineer	2024	1853	6987	5134
Data Analyst	2024	1267	5715	4448
Machine Learning Engineer	2024	1068	4576	3508
Manager	2025	2452	4963	2511
Engineer	2025	4018	6460	2442
Analyst	2025	1391	3633	2242
Research Scientist	2024	286	1968	1682
Data Scientist	2023	450	1925	1475
Data Engineer	2023	488	1853	1365

⇒ Showing that "Data Scientist" experienced the fastest job growth in 2024 with an increase of +7,007 **roles**, followed by "Data Engineer" (+5,134) and "Data Analyst" (+4,448), underscoring the rapid expansion of data-centric positions in recent years.

#### IV. Strategic Business & Remote Insights

1. Which company sizes offer the most remote jobs?

	-
company_size	Total_Jobs
Medium	29715
Large	389
Small	119

⇒ Showing that Medium-sized companies dominate remote job opportunities, offering **29,715 positions**, far more than Large (389) or Small (119) firms.

2. What are the top 3 highest-paid roles per employment type?

jobs	employment_type	annual_salary	ranking
Technical Writer	Contract	500000	1
Principal Data Scientist	Contract	416000	2
Data Scientist	Contract	338526	3
Machine Learning Engineer	Freelance	100000	1
Data Scientist	Freelance	100000	1
Backend Engineer	Freelance	61333	3
AI Architect	Full-time	800000	1
Architect	Full-time	800000	1
Software Engineer	Full-time	800000	1
Data Analyst	Part-time	405000	1
Data Analysis	Part-time	400000	2
Software Engineer	Part-time	381004	3

⇒ Showing that the highest-paid roles by employment type include **Technical Writer** (Contract, \$500K), **Machine Learning Engineer** (Freelance, \$100K), and **AI Architect** (Full-time, \$800K), and **Data Analyst** (Part-time, \$405K)

3. Which job titles show the clearest salary progression across all experience levels (Entry-level → Mid-level → Senior-level → Director)?

jobs	entry_level	mid_level	senior_level	director_level
Research Engineer	141855	206804	217745	290000
AI Developer	90564	143404	178322	276000
Engineer	101841	148798	183295	242713
Solutions Engineer	50133	130789	185414	239871
Systems Engineer	115029	161557	184444	232750
Machine Learning Engineer	149826	179467	207297	230632
Software Engineer	123786	171103	200711	228015
Solutions Architect	126125	141504	193615	218575
Bioinformatics Scientist	48000	127143	156467	213600
Analytics Engineer	111270	145297	163541	207674

⇒ Showing that roles like **Research Engineer**, **AI Developer**, and **Solutions Engineer** demonstrate clear **salary progression** across career stages, with **earnings increasing significantly** from entry-level to director positions.