

# Rising Jobs

**Summary:** This is a mini-project to **predict** the future **data jobs** which will be **highly** valued in the coming years. We all face this common problem while **internet surfing** some reputable jobs where a person is **sceptical** about the career path they are choosing. Many things could be taken into consideration like **salary**, **demand in future**, which **medium to choose**, etc. Here in this **report** you can get some of your answers cleared.

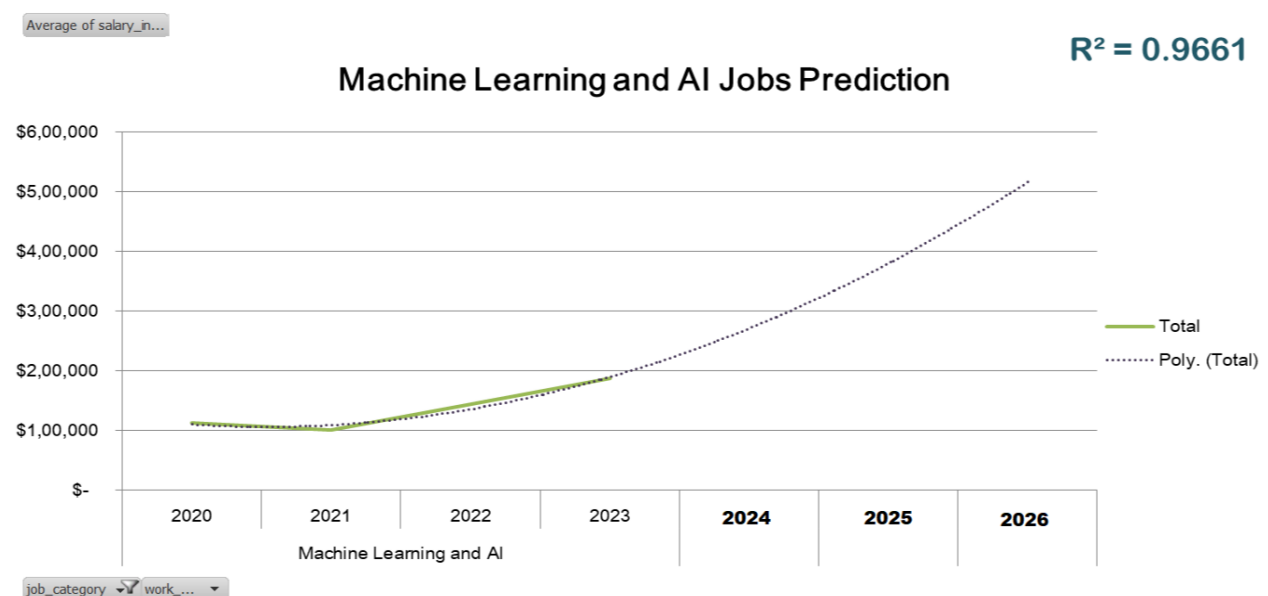
**Objective:** To predict the future of the top trending present Data jobs

## Let's Start!

### 1. Analysis and Findings

I have taken 4 major job categories which is highly trending in the present which are: - **Machine Learning and AI**, **Data Science and Research**, **Data Engineering** and **Data Analysis**.

The charts below describe their salary average in coming years through **time-series**. We can see an **extreme rise** of 2 job categories, 1 **moderate rise** and 1 **surprisingly** way different than what we must have imagined.

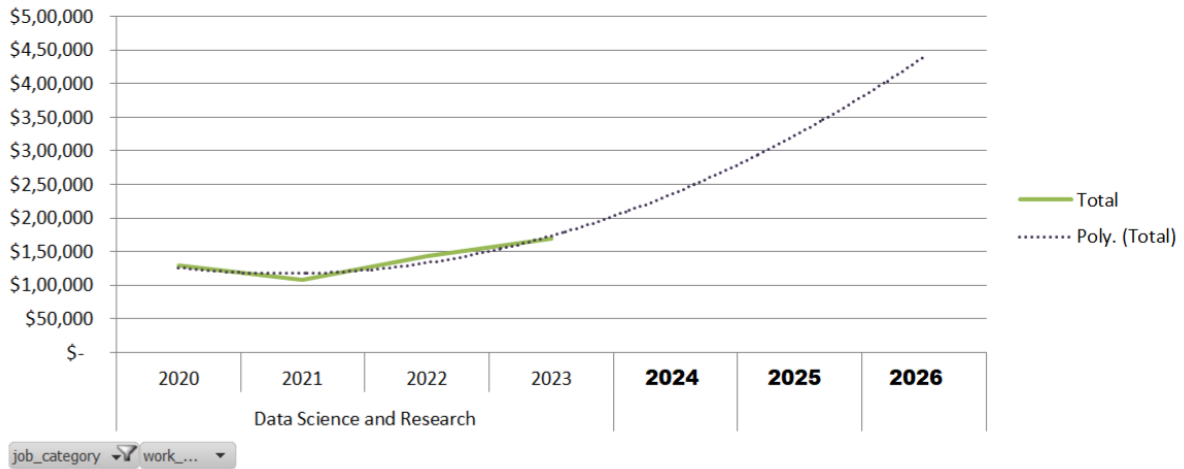


Machine Learning and AI seems like a **good** choice of career as it has a **high demand** in future with **higher salaries**.

Average of salary\_in...

### Data Science and Research Jobs Prediction

$R^2 = 0.8911$

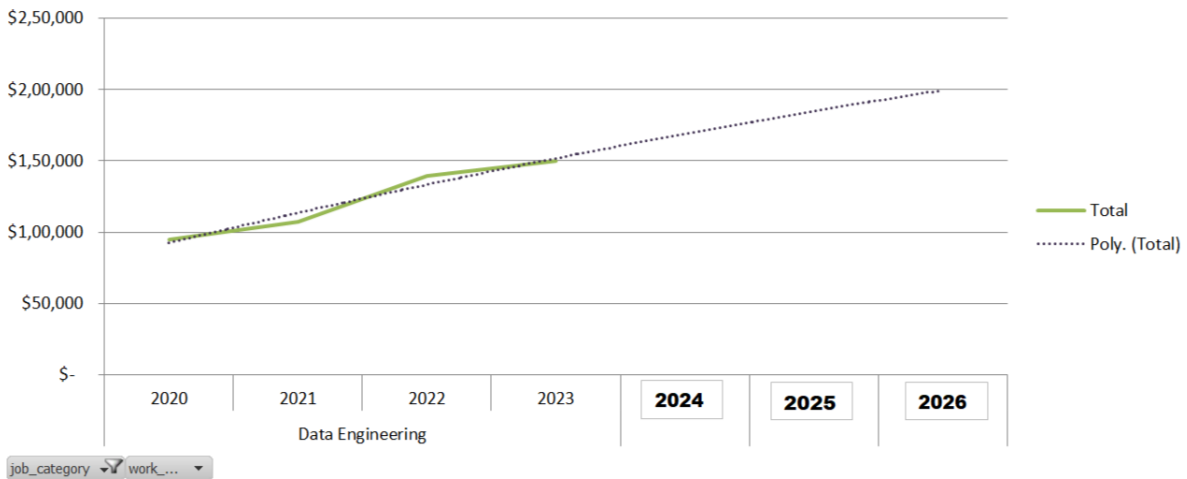


Data Science and Research too seems to be a **well performing** job category which gives a **promising** rise in future just like ML and AI.

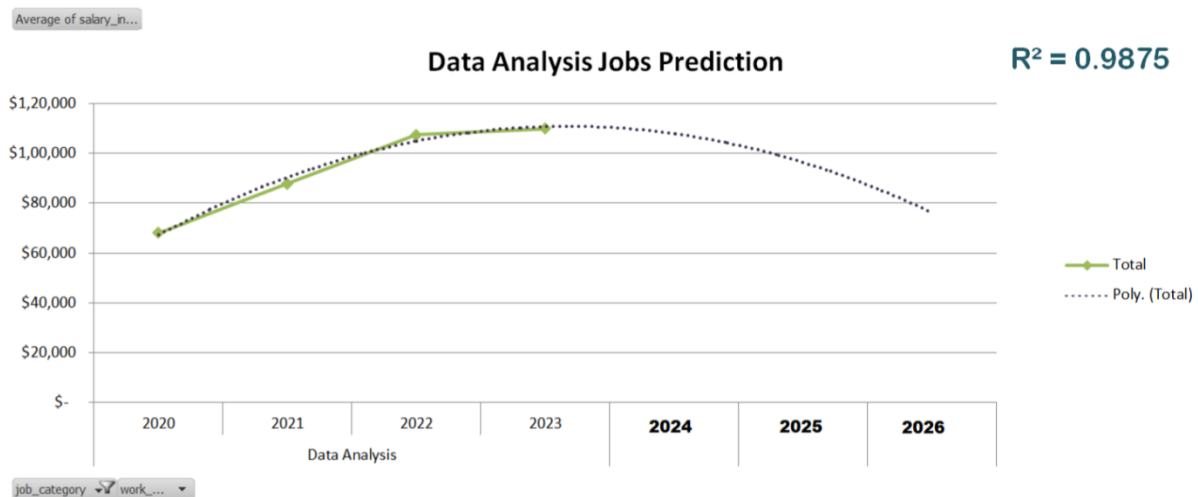
Average of salary\_in...

### Data Engineering Jobs Prediction

$R^2 = 0.9564$

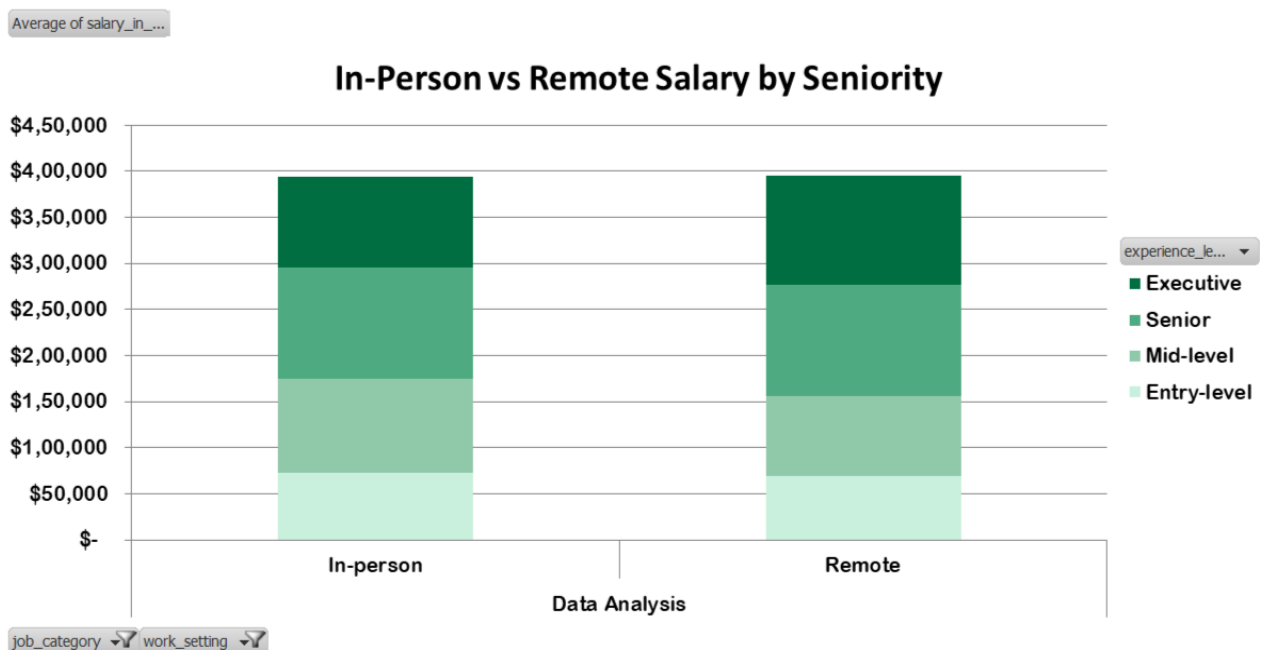


Whereas, Data Engineering seems to have a slow increase as compared to the other 2 jobs. Yet it seems to be the steadier one among the 4 categories with a slight bend downwards.



This one had the most surprising results, as we always hear around that Data Jobs will increase in demand in the coming future but the result gives a different vision. To make it easier for the viewers to decide I have further analyzed it into what kind of levels and company type we should prepare for.

## 2. Digging into solving



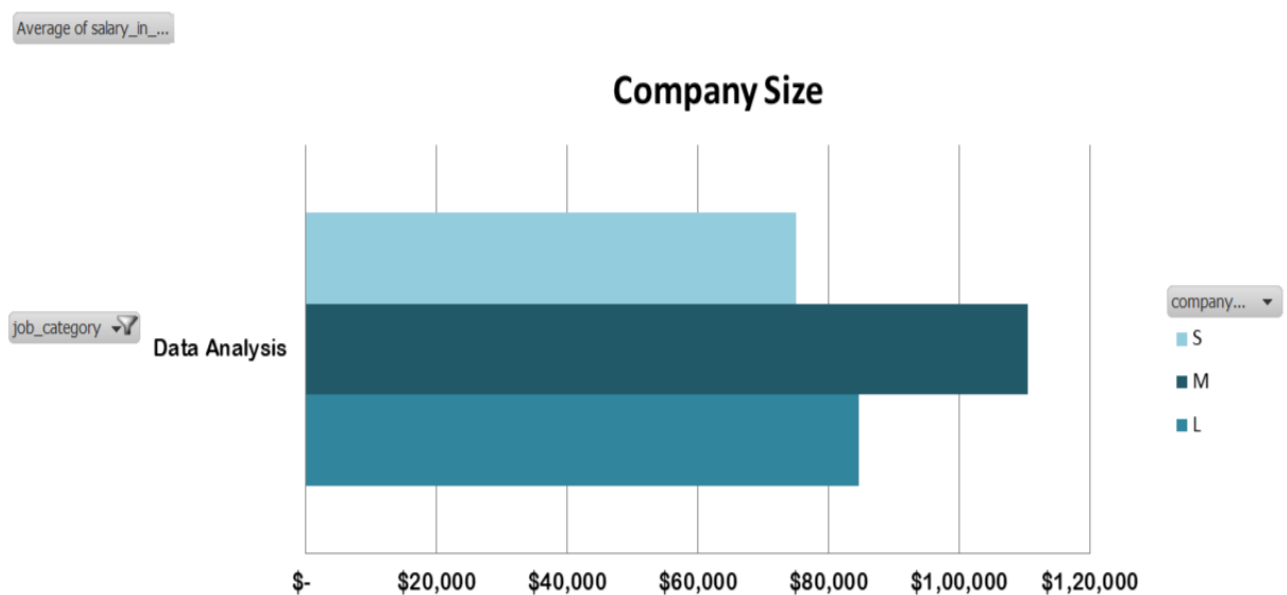
Here we have 2 of the most favourable work settings which are In-person and Remote. We can now compare all types of hierarchical levels in 2 work sets.

- Entry-Level seems to be almost similar with just a slight difference in averages between In-person: \$69,798 & Remote: \$72,789
- Next we have the Mid-Level where In-person: \$102,555 is higher than Remote: \$86,711

- iii. Then we've got Senior-Level. There isn't much of a difference just a couple \$100. In-person: \$119,969 and Remote: \$119,878
- iv. Finally we have the Executive level which is the topmost hierarchical level in our dataset. This time Remote leads the average by \$118,889 and In-person having \$98,298 being the average.

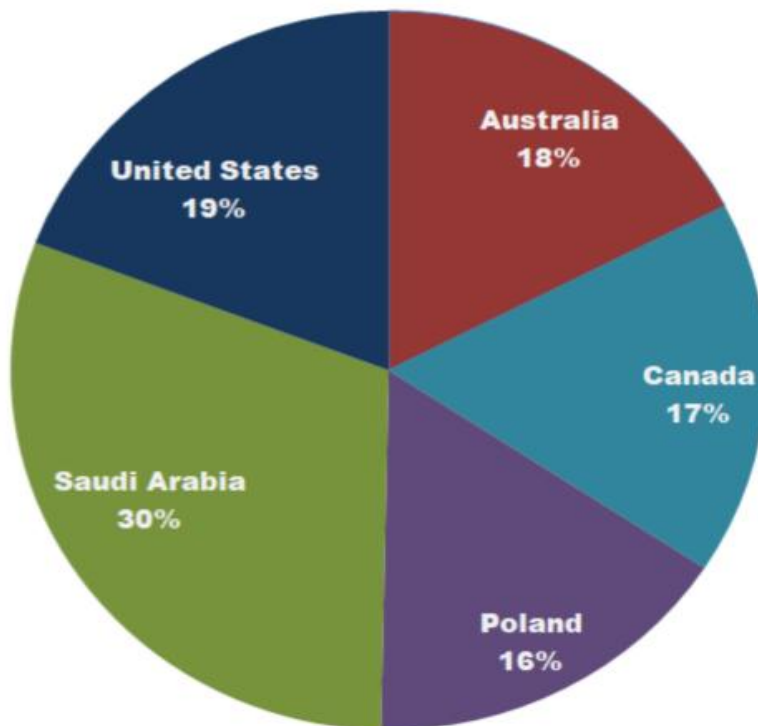
The above observations indicate some ways to what kind of work-settings we should pursue on which levels. For the Entry-Levels and Executive Levels, remote seems to be a better option as the average salary here are higher than the in-person jobs.

As for the Mid and Senior Levels, In-person seems like a better option, so if anyone gets promoted to mid and senior levels they should probably go for in-person opportunities.



This chart clearly indicates that Medium size companies gives more opportunities as compared to Small and Large. So, it would be best for one to apply more to Medium sized companies. Overall, all three sizes of companies have a good salary averages but, it would be better to focus on the target for better opportunities.

## Data Analysis



Here, we have the top 5 countries with the highest salary averages. In the country-wise opportunities, Saudi Arabia takes the lead with highest salary average constituting 30% of the chart followed by the USA with 19%. Then we've got Australia with 18% followed by Canada 17% and then finally Poland 16%.

## 3. Suggestions

- I. ML and AI, Data Engineering and Data Science, these fields will have a tremendous growth in the future that could build a high competition in the near future. This could also lead to saturation. Therefore, if one is really passionate about these fields, they should probably start preparing quickly to get pass through competition and learn unique extraordinary skills to excel in these fields.
- II. The time-series of Data Analysis had a different story to tell, hence, we need to perform deeper analysis to find out the key reasons.
- III. To work up the game in this field, one should focus on up skilling themselves and try to make connections which happens to be a game changer. When trying to apply for this role, one should up skill themselves to Mid to Executive level to stand out from the rest.

- IV. The **'In-person vs Remote Salary by Seniority'** chart explains what kind of position to pursue in which types of **work-settings**. **Remote** seems to be performing well for the **Entry** and **Executive** Levels, hence, the chances of getting hired in remote jobs are probably much higher than In-person. As for the Mid-Level, In-person seems like a better option so better to choose this option while applying. There isn't much difference in the Senior-Level work settings, so better to apply to both kinds.
- V. To look for much better opportunities, candidates should apply to Medium sized companies as mentioned for higher selection rate.
- VI. And finally apply to countries with more demand like Saudi Arabia and USA

**Note: - All the Analysis and key findings were done on the basis of the dataset provided in the link. The following dataset was taken from kaggle to create a mini project to practice Analysis and Forecasting. Thank You!**