

Topic: AI Developer's Salary in 2024



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AI developer salaries:

Abstract:

Artificial Intelligence (AI) has become one of the most in-demand technologies of today and future, evolving in every field of life and bringing a wave of change in industries with an increase in the employable area. This paper dives into what the future of an AI developer salary would look like in 2024. The paper went on to conduct an analysis on factors driving pay including, experience, residence, company location, salaries by job title and industry. This also describes the introduction to the paper and then goes to literature review and then it goes to take a look at methodology. The report is going to be a very interesting read for AI beginners that want to know how they are good income wise and for employers that are attempting to bring and retain

best-in-the-field talent to their company, in these highly competitive times. We hope these findings will help them understand the changing AI workforce and compensation trends.

1. Introduction:

Artificial Intelligence (AI) has seen impressive growth over the past couple of years, impact on industries and driving technological innovation. This growth has exceeded the supply of experienced AI developers needed to deliver real-world applications. As demand seems to grow only more acutely, the AI talent landscape is more important than ever, both for the workforce and for the employers. Researching the state of AI developer salaries in 2024 To get to the bottom of that, researchers analyzed a comprehensive dataset of salaries to determine what factors lead to higher compensation for these in-demand experts.

2. Literature review:

AI engineers can earn an annual median salary of \$136,620 [\[1\]](#). The median base salary for an AI engineer is \$108,043 [\[2\]](#). Nowadays, it is considered a path controlled by each individual and adapted to one's aspirations and environment[\[3\]](#). There is a need to prepare students, staff and organizations for AI-enabled education, as well as to develop AI to better understand the education domain[\[4\]](#).

3. Methodology:

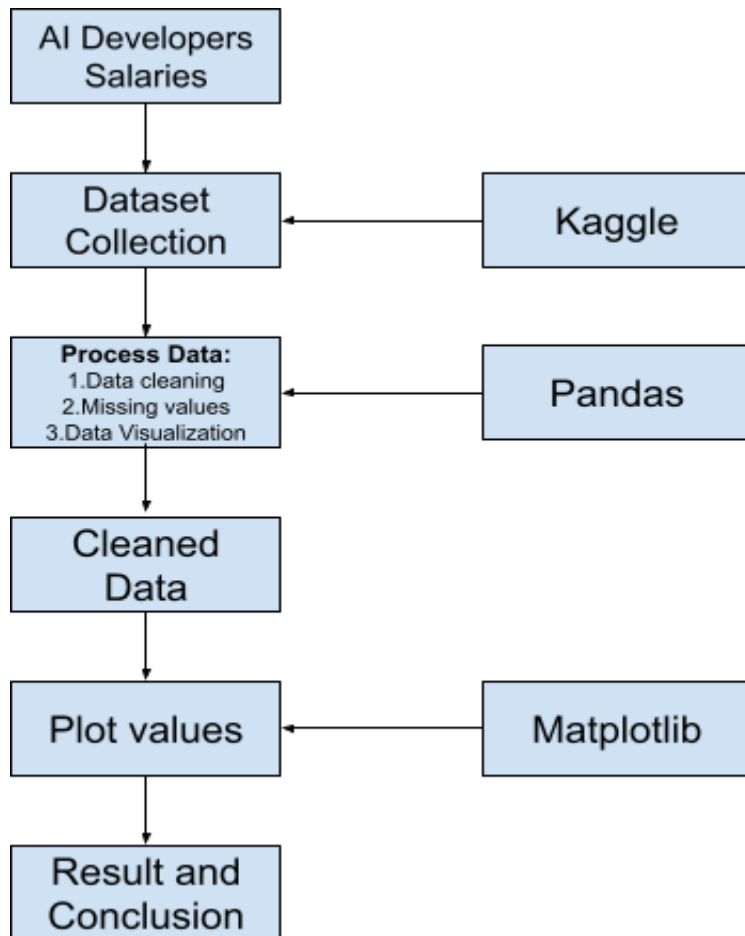
This study is all about convincing the coming newbies to the tech world that AI is life changing and more reliable among all the technical fields. The salaries are highly paid and there is more scope in future. Researchers used the term 'highly paid' after research on AI development and came to know that it may depend on some factors but this field is highly recommended. The recommendation is not personal but it's visualized by the data that was taken from Kaggle platform.

Researcher uses the secondary source of data that is taken from literatures, and websites to avail the information about the topic. The research done is qualitative because it comes from books, papers and online publishers to get information and answer the questions of students related to fields taken in future.

Further researchers use python language and its libraries pandas and numpy to describe and visualize the data set. It uses `pd.read_csv` to read csv files getting from Kaggle, furthermore it uses `df.shape` to read total lines and columns in the data set. `df.isnull` used to check the null values in the table. It also uses `IQR = Q3 - Q1` to get interquartile values to set the data in a good format. `plt.figure` is a matplotlib library command to plot a figure with some parameters. `sns.lineplot` is a seaborn command that takes x and y axis parameters to make a chart it may uses `sns.barplot` to plot value as a bar/histogram format. `df.select_dtypes(include=['number']).columns.tolist()` is a method that used to take a column that has int type values and same `df.select_dtypes(include=[object]).columns.tolist()` other for object type values has been used.

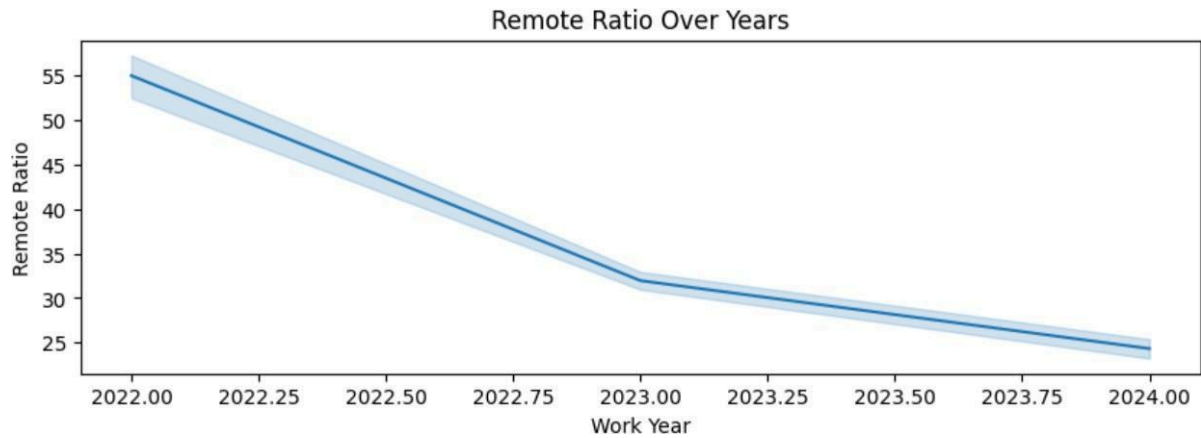
3.1 Flowchart:

Here is a brief flowchart that tells all about how researchers conduct research from scratch. Let's take a look.

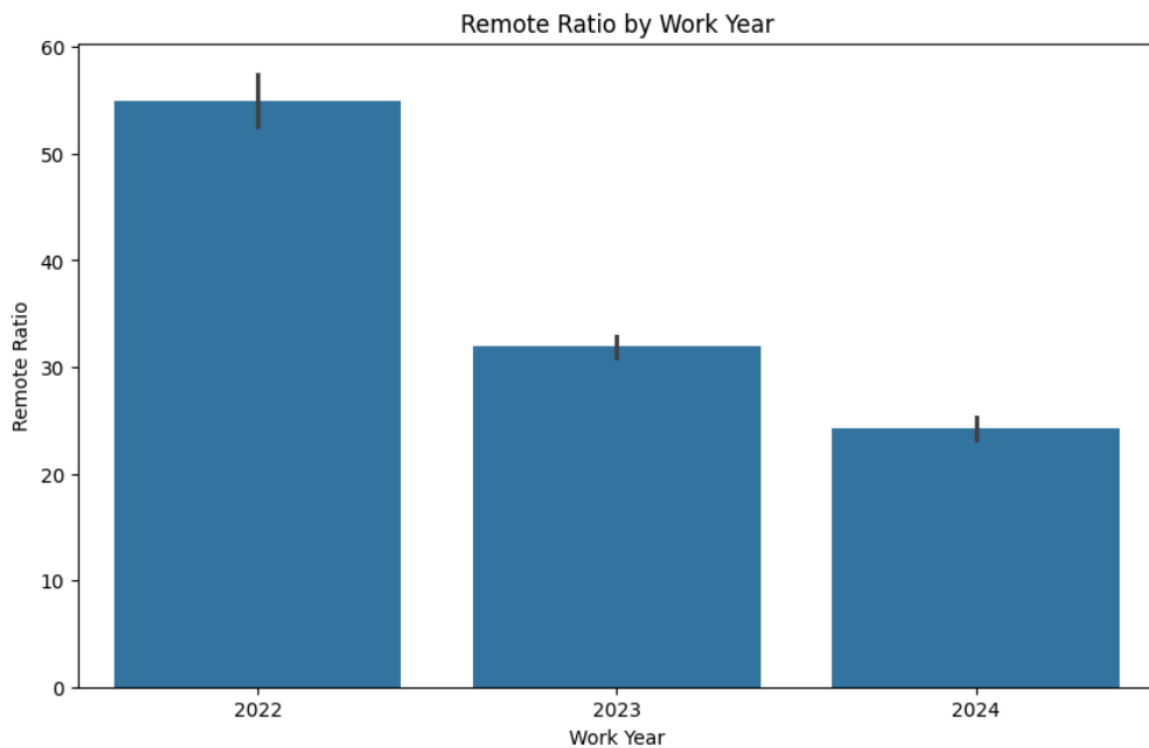


3.2 Remote Ratio:

Researchers analyzed some of the factors from data that included remote ratio, type of job and fields with respect to working years and concluded that remote ratio is going to decrease over years. It may be due to Honors wanting to work in a proper decorum of the organization and maintain it and as we pass through Covid-19 and in that pandemic people more trust on remote working and now condition is well so they want to work from office to meet new peoples and increase understanding between them. Let's have a look on what charts says:



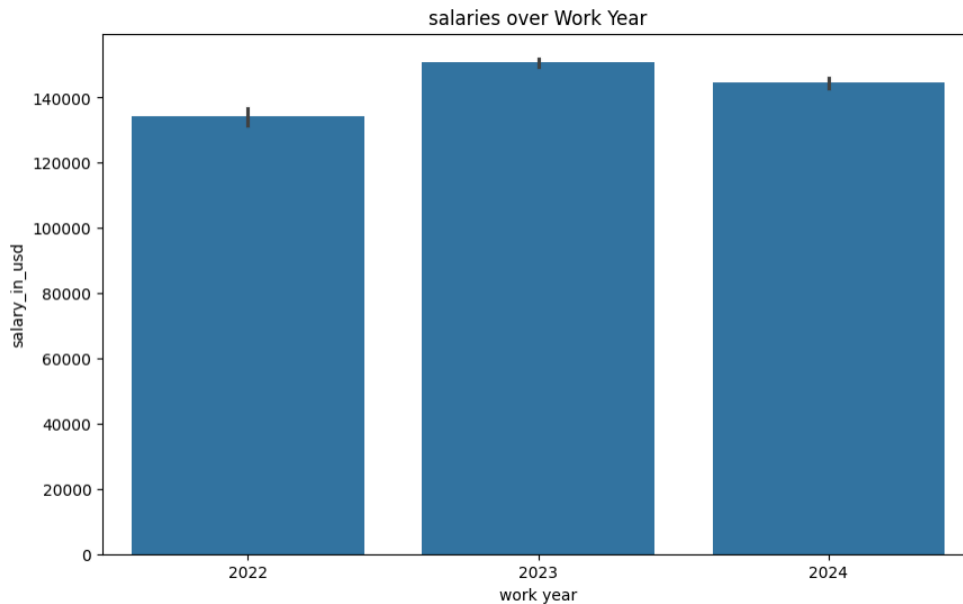
If we talking about histogram it will look like this:



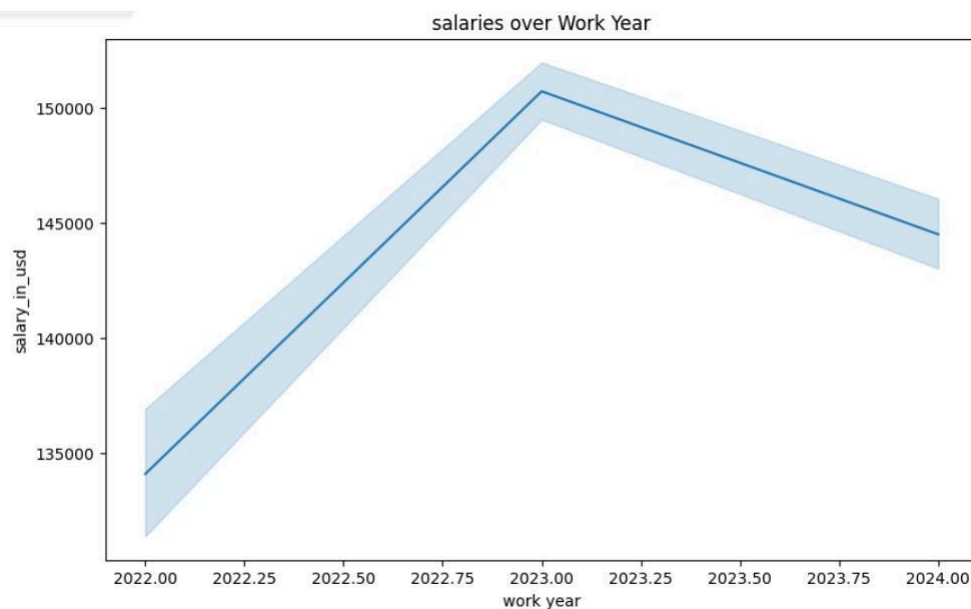
3.3 Salaries over Years:

Researchers are also working on calculating salaries over years to determine if there is any scope in that field now or not. After getting data from Kaggle we found that it minor decrease in recent year but it

has increased the overall salaries ratio. It is very important to let know before jumping into any field that you have knowledge of what its demand is and how it is growing in communities. Let's look at the charts what is it want to tell us:



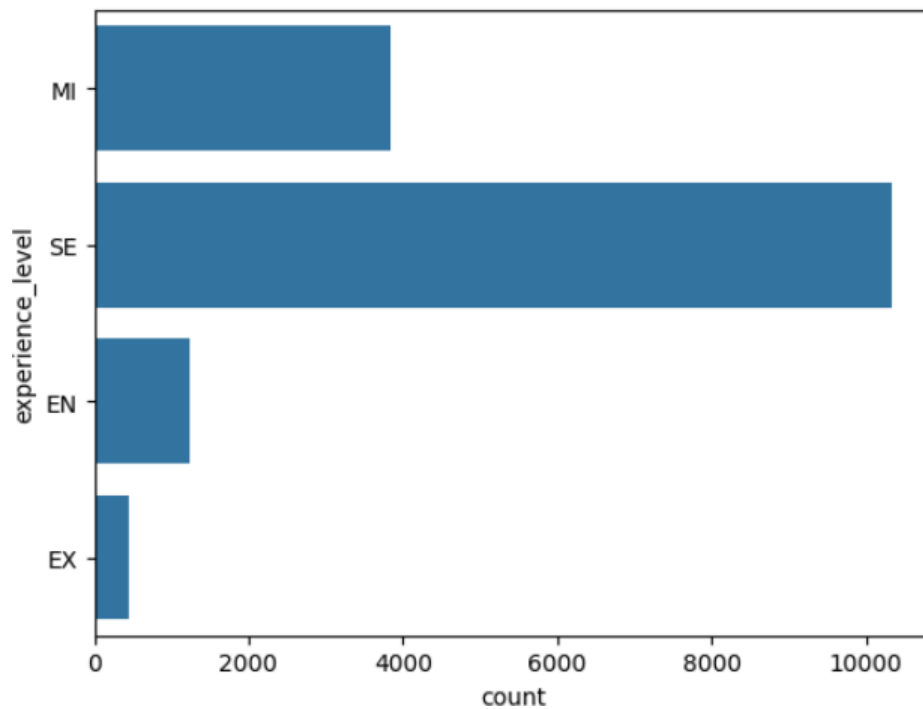
Let's look in another format to clear view:



3.4 Job Levels:

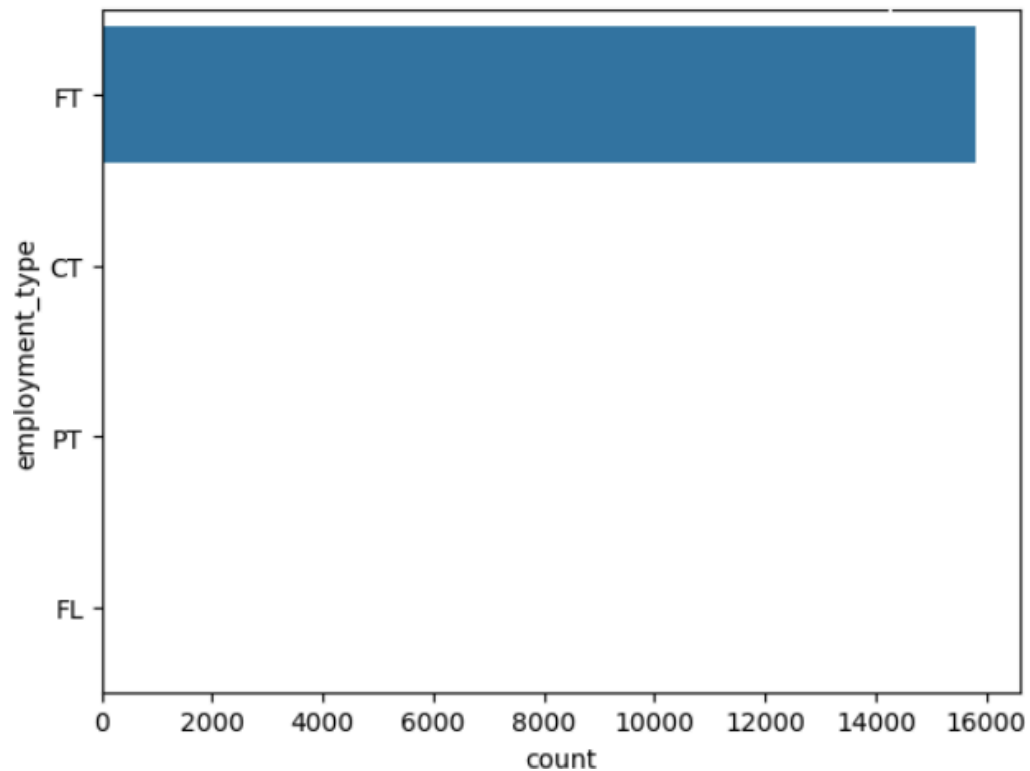
If we talk about experience level, It must be a question that which levels are more recommended in organizations? The answer depends on data. The data researchers takes tells us that Mid senior level are

more counts in organizations other than Intermediate and Director level. Let's have a look at charts to clearly identify the problem statement.



3.5 Job Type:

If we talk about job types we have more options like full time, part time and others but which type is best? The answer is data! The data is everything. We took a look at our data to explore which job type people prefer and concluded that more people want to work full time. It may be because part time may be suitable for students but it may affect their studies and be difficult for time management so people related to SE have a huge amount of full time job holders. Let's see towards our visualized data:



4. Result:

In Result, you are provided with key findings, competitive analysis with literature review and limitations about what can AI developers earn and is it worth taking field or not

4.1 Key Findings:

4.1.1 Salaries of AI developers are directly related to Experience level.

4.1.2 Senior level students can earn more than a junior level and others.

4.1.3 Salaries are increasing compared to the Past few years.

4.2 Visualization:

4.2.1 Figure 1.1 and figure 1.2 shows that the remote ratio is decreasing over the past few years.

4.2.2 Figure 2.1 and figure 2.2 shows that salaries are increasing in 2023 and compare to 2023 minor decreases in 2024

4.2.3 Figure 3.1 shows that senior level are major in organizations other than mid level and director level.

4.2.4 Figure 4.1 shows that full time employees are more than the part time employees or any other time scheduling.

4.3 Comparison with Literature Review:

4.3.1 From literature review point [2.4/1] is directly related to researchers that senior level researchers earn more salaries.

4.3.2 From literature review point[2.2] hiring rate also increases 74% annually.

4.4 Limitations:

The Research is limited to the data set getting from kaggle and also from study getting from some websites and literatures. Further research is done on the basis of data given charts and analyzes the behavior of AI developers jobs and salaries.

4.5 Accuracy:

This model shows 81% accuracy as it is tested by applying KNN algorithm and skit learn (a python library used for machine learning model). Here is the output of the KNN model applied on the data set given.

Accuracy of the k-NN model: 0.81

5. References:

1. <https://www.bls.gov/>
2. https://www.glassdoor.com/Salaries/ai-engineer-salary-SRCH_K00,11.htm
3. Paper 1:
https://www.researchgate.net/publication/370425300_Artificial_Intelligence_and_Career_Development
4. Paper 2:
<https://files.eric.ed.gov/fulltext/EJ1318705.pdf>