Average Total Income Calculator

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Objective: To Develop an Income Calculator

Based on the following characteristics:

- Age
- Gender
- Education Level
- Job Title
- Years of Experience
- Salary
- Country
- Race

Interface Overview

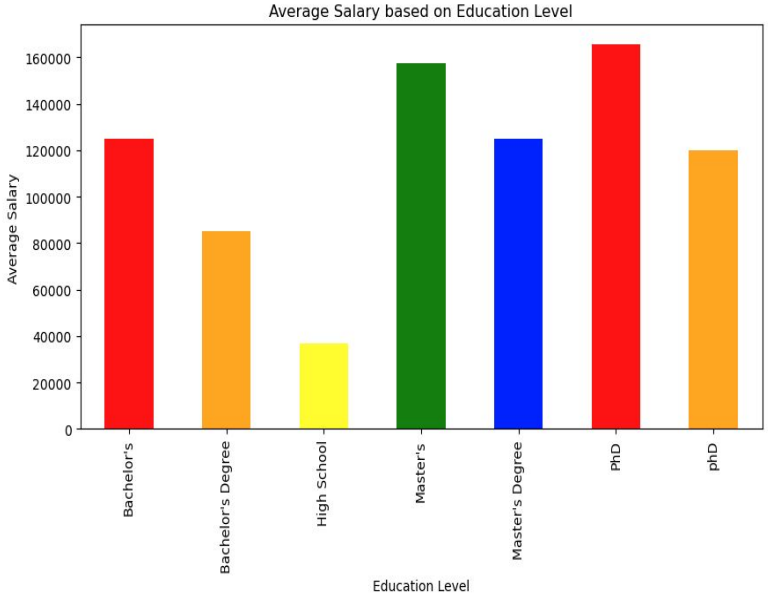
- Pandas
- Plotly.express
- Pickle
- Sklearn
- scipy
- numpy
- matplotlib
- Dash (ML)

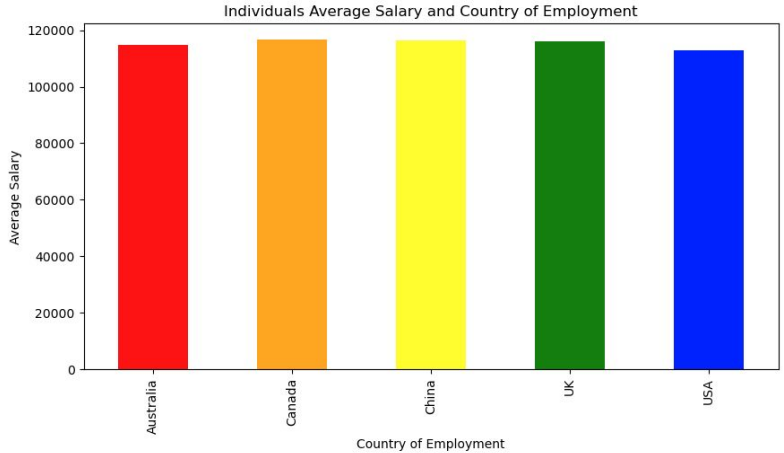
Model Prediction

We used a supervised machine learning regression model

- Decision tree regressor
  - R^2 value = 0.96 which is very high and yields high external validity
  - Used for predictive modeling

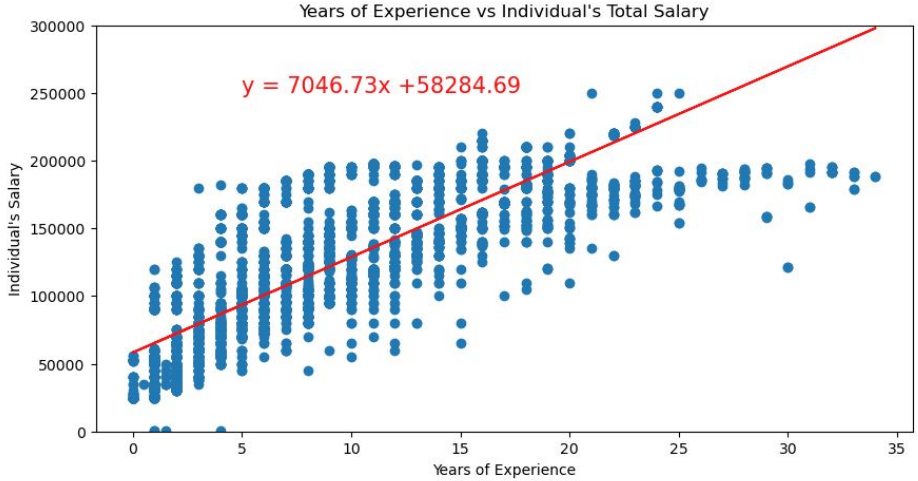
- Education Level had a significant impact on average salary
- Salary remained fairly synonymous between countries of employment.



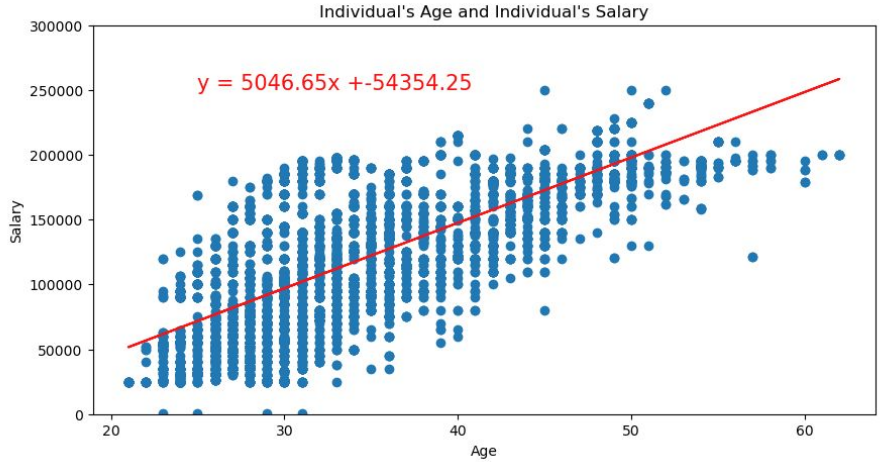


Graphs Continued

The r-value is: 0.6544294992867405



The r-value is: 0.530072280427051



- R-Values displayed in each graph are before the model was trained.

Use Cases (Conclusion)

- To see what a specific company and subsequent specific position should be compensating you.
- To see if there are any discrepancies between average compensation for the same position across varying countries and races.
- To look at how compensation changes by age and throughout the course of your career (years of experience)