Lessons Learned

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1. Combine skills with similar meaning.

To combine the skills, I first show the names of each skill and then put them all into a word file. Then I check the key word of each name in the word file by using “CTRL+F”. For example, I searched “machine” and “learning” for the first skill “Machine Learning” and find the similar skills “Machine Learning Algorithms” and “Deep Learning”.

2. Delete skills with less importance

Even with skills combined, the total number of different kinds of skills is still unbearably large, so I decided to truncate some. I assume those mentioned only 2 or 3 times are of little importance and they are deleted, which makes my analysis in a more organized way.

3. Bar plot building

There were some issues when I was making the bar plot. First, the default setting of the bar plot is that the x axis is the skill names, but all the names are so crowded in the x axis, so I used the code “+coord\_flip()” to flip the coordinates. Then the y axis were skills and they were shown neatly. But, I found out that skills were alphabetically ordered, and I wanted them to be ordered in terms of their importance, so I changed their names by adding an index in front. For example, “Machine Learning” ranked the 1st, so I changed its name to be “01. Machine Learning”. In this way, the skills are ordered in an informative fashion.

4. Pie chart building

In order to build the pie chart, first I needed to construct a stacked bar chart. After that, by adding the code “coord\_polar(theta='y')”, it was converted to the pie chart. Next I added the black border and labels to make it more readable and informative.