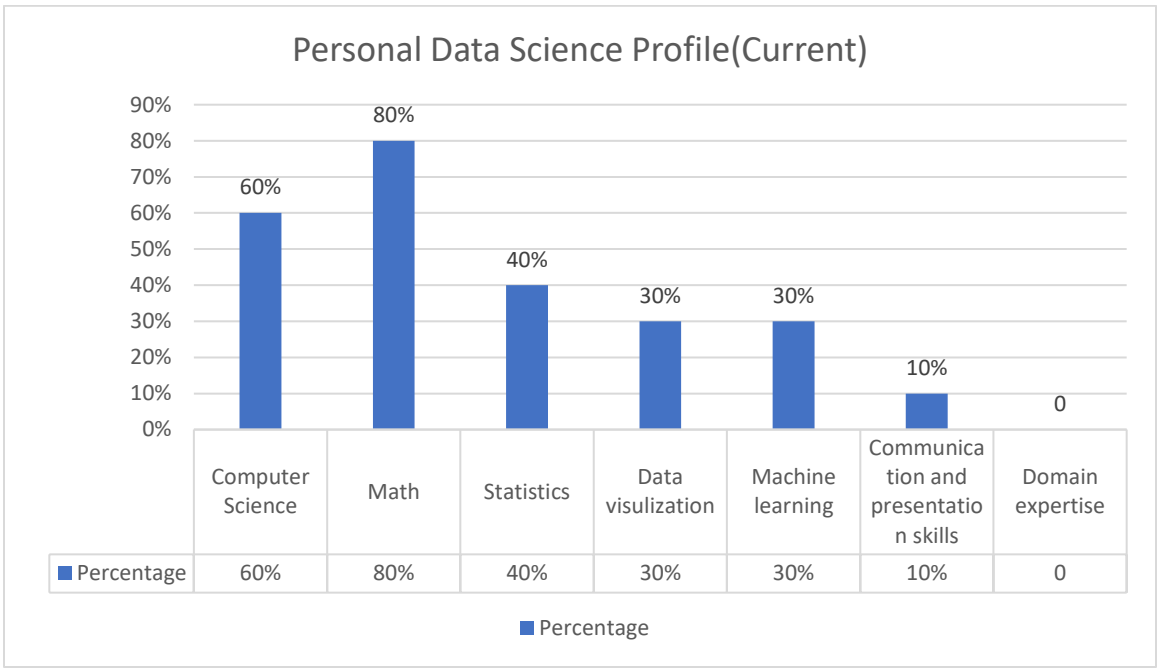
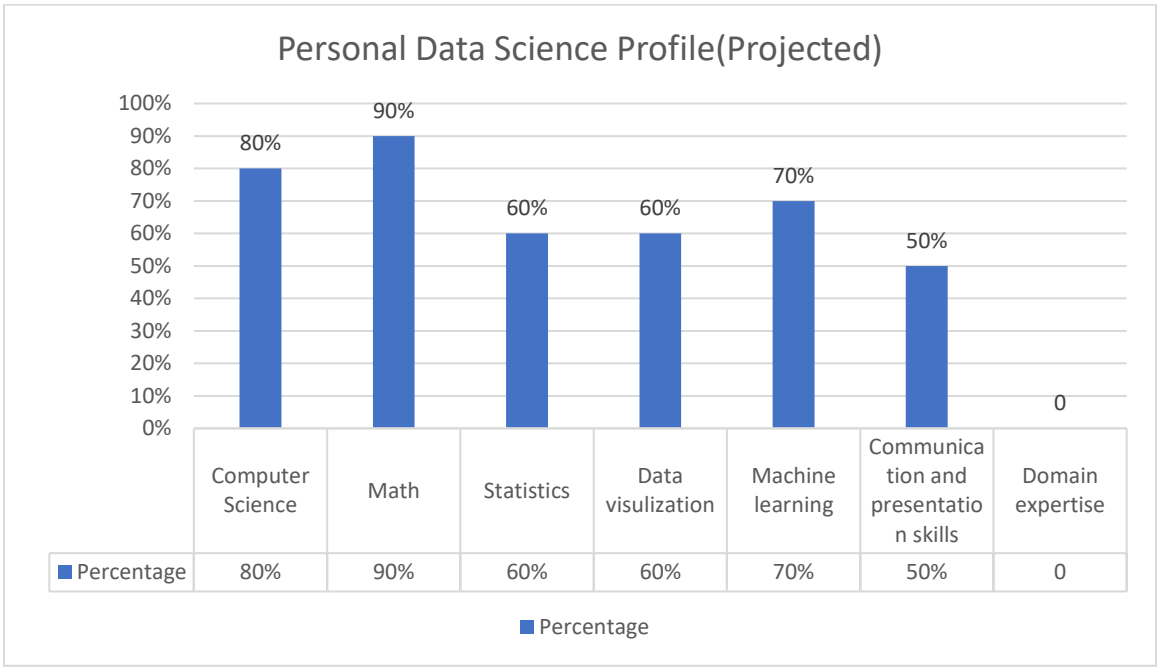
1.a.





Since these are the personal data science profile charts, the skills which are more related to data science filed should be put at the front of the chart. Based on the understanding of the data science so far, I put the areas in the above order. Especially, “Domain expertise” is kind of extra information in these charts, and it would probably be 0, so it should be put at the end of the chart.

1.b.
Based on the understanding to the data science so far, I believe “Analytics and Modeling skills” and probably “Programming skills” should be added to this data science profile. “Analytics and Modeling skills” is obviously necessary and fundamental when we study with “data”, and sometimes we need to use some programming languages to help us analyze and study data so that “Programming skills” could be also considered.

From my perspective, “Computer Science” could be removed. “Computer Science” is a huge topic, and it includes almost all other skills in data science profile. When we are creating personal profile, we should specify our skills rather than just say “Computer Science”.

2.a.
In the second paragraph of the article, different from statistics, “data” in “data science” is increasingly heterogenous and unstructured, different types of data are emanating from networks with complex relationships between their entities. Secondly, data analysis requires integration, interpretation, and sense making that is increasingly derived through tools from many related disciplines.

2.b.
According to the article, we could extract casual models from large amounts of data and get accurate predictive models from large amounts of data in other disciplines, at least big data could bring the theory development into a right direction even though predictions could have some small mistakes.

From my perspective, the interesting point is that questions that human might not consider could be asked and validated by big data.

3.c.
Data Science and Prediction (Sorry for not coming up with a better headline)
This paper mainly discussed what “data science” and “big data” are, what kind of skills should be mastered as a data scientist, and what implications for scientific inquiry are. The author addressed these questions from the perspective of predictive modeling.