When it came to this course, the one topic that I constantly felt that I came across was the text based applications and models. The one that most comes to mind is when we had to apply the methods to determine the document similarity since I applied the same methods to determine how much of songs from completely different ears compare to one another. Throughout this course, I felt that we have learned various models to apply on incoming forms of text to gain a better insight on patterns throughout them. In my current positions as a research intern, I can definitely see myself applying these methods to gain a better insight on subject areas throughout different institutions. But overall, I think by learning these different models and unsupervised learning techniques, it has given us more tools to apply in different scenarios. In working through all of these topics, the most trouble that I had was with the neural networks these past couple of weeks. The true trouble came when building the layers for the networks and possibly adding the weights to them all together. With the layers, or nodes, it combines input from the data with a set of coefficients, or weights, which either amplify or dampen that input, thereby assigning significance to inputs where regard to the task the algorithm is trying to learn. (Nicholson, 2019) Moving on from the obstacles that I faced while taking this course, I wanted to look into what I think I am now capable of performing after taking this course. For example, what questions could I now answer, where could I apply some the skills that I have learned or aid others in solving with the knowledge that I gained overall. Since I currently work in the academic field with research, it be interesting to see what new answers I could look for by possible applying some things I have learned to gain a better picture or look further into how data mining is used in this particular field. For example, a company named Lexplore has explored ways to identify dyslexic kids quite early on rather than the traditional process of identifying such kids which was manual and involved a lot of paperwork making it cumbersome and error-prone. (PowerWebScraper, 2020) By reading further into their research, I was able to see that they were applying feature reduction and selection throughout the process. It is exciting to see methods that we have learned in this course being applied in real situations in the world and determining answers that have the possibility of helping people in various ways. In the end, I think I learned very much in this course and was able to real world example to many of the topics that we covered week by week.

References:

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