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Mrs. Secord

ISM 1

17 February 2022

Research Assessment #18

Date: 17 February 2022

Subject: Machine learning Projects

MLA citation(s):

"Top 20 Machine Learning Projects." *InterviewBit*, InterviewBit, 12 Dec. 2021, https://www.interviewbit.com/blog/machine-learning-projects/.

Assessment:

Focusing on some of my final product ideas, I decided to explore some more ideas I had in mind with this research assessment by taking a look at an overview of a variety of machine learning projects. Hence, I was trying to get a deeper understanding on what could be the final idea before I finalize my product idea this week. From ideas such as course recommenders, chatbots for answering student questions on-demand, image style transformers, automated system for basic functions on devices using hand gestures and natural language, and object detection models, I have gained a large perspective on what projects I can do this semester in ISM. I wanted to get a better picture of any other final ideas that could be integrated or become my final product this semester. With my current understanding of machine learning. I was hoping to find some projects related to natural language processing, computer visión, or conversational AI such as chatbots. To find new final product ideas, I found the article,"Top 20 Machine

Learning Projects," which went over many different examples of machine learning project ideas that I could use or build on for my final product.

After viewing the article, I was able to get mamy machine learning research project ideas such as music recommendation systems, text summarization, personality prediction, Youtube comment analysis, stock price predictions, voice recognition, fraud detection methods with anomaly predictions, and even customer support service models. For example, text summarization could help us summarize important information of PDFs to save time for lengthy documents while we could use voice recognition to conduct basic functions by speaking instructions to our devices ("Top 20 Machine Learning Projects"). Furthermore, I learned one more project idea such as Uber Helpful Customer Support that is based on an assistant that can help perform functions to help the customer and improve user-experience to help save millions of dollars for Uber ("Top 20 Machine Learning Projects" 12). I learned quite a lot about music recommendation systems and prediction models that could help create a better user-experience and generate very cool and innovative solutions to real-world problems that we face daily. Indecisiveness on what we want to watch or to listen to could be easily solved with new recommendations that we are likely to like based on things we have already watched. All of these different examples helped me understand that I was going in the right direction since the beginning to create my own impact with my final product. Moreover, I think one great idea that would be very beneficial would be a chatbot for helping students in Frisco-ISD by answering their questions and I could possibly integrate my other idea of course recommendation into this chatbot as well! Overall, these examples are all very great to automate several functions in our society to help others in our community. I will build on my ideas and the feasibility of them as I have a greater perspective on what projects I could create for my final product!

I think I am ready to finalize my project proposal and get feedback from my mentor to start working on my final product soon in ISM! I will possibly start working on my final product from next week with this new knowledge I gained as well as my learning from my original work.