Brian Engel

Module 1 Assignment

I think that a wonderful use of AI would be to incorporate it in the kitchen as proposed by the first prompt, for busy adults and people that lack cooking skills, and can be made for so much more than just that.

The first thing that this technology could do is recommend recipes. A person can enter what they like or don’t like, ingredients they have, allergies, any nutritional requirements such as a minimum amount of protein, amount of time to cook it, or any other restrictions they have. After that, it should be fairly simple for the AI to sort through a list of recipes and find something that matches.

The next thing it can do is set up a grocery list for any meals that you have selected. It can consolidate the ingredients and ask if you already have them on hand, and if not add them to the list. As someone who cooks all the time, this would be a great help organizing a trip to the grocery store. With most grocery stores offering delivery, it could have an option to put in the order for you, and have it delivered to your house, so you don’t have to even think about it.

Once you are ready to cook the meal, it can provide step by step instructions on prepping ingredients, such as measuring, chopping, and otherwise preparing them before you actually start cooking. For an inexperienced cook this would probably be the most important part, since it takes quite a bit of practice to be able to do this type of work while cooking at the same time. Once any preparation is done, the kitchen assistant could oversee keeping timers for all the cooking operations that you have going. The best way to do it would be to have them all end around the same time, but not the exact same time. Also, if there are several steps in cooking something, like adding ingredients throughout the process, you would want the AI to time it so nothing happens at the same time. You don’t want to have to add garlic to your sautéing onions while you are supposed to be flipping the chicken in the oven. This way it keeps all steps separate but everything is ready and hot at the same time.

Since the kitchen assistant helps with the recipes and ingredients, it could also help with substitutions if needed. If you were lactose intolerant or needed gluten free or were diabetic or some other condition, it could substitute appropriate ingredients when needed into recipes. In this same frame of mind, it would also be able to calculate the nutritional value of the meal, and if you are lacking in any vitamins or minerals, or where eating something that is just terrible for you, it could alert you to that fact. This might actually help people to eat healthier if they knew what they were putting in their bodies.

This system would not really need much hardware, and a smart phone would be the only truly required piece of hardware. I think that a permanent device in your kitchen would probably be optimal though, such as a mounted tablet or echo show or something similar. You wouldn’t have to worry about getting ingredients on your phone and it’s bigger so it would be easier to see the steps in a recipe. It would need to be connected to the internet, for searching recipes and ordering groceries, and in the case of the latter, would need access to your account with a delivering grocery store of your choice.

One ethical concern with this type of AI would be data security. The AI would have access to personal data, food allergies, and possibly health conditions, and storing this type of data makes the program vulnerable to data breeches. There would also be the risk of this information being sold or selling out to a special interest like the beef industry to include more recipes with beef in them. Also, depending entirely on technology and not using any common sense could be disastrous if the AI got something wrong when dealing with an allergy or medical condition. There is also a concern that the algorithm might be biased toward food that the majority of people eat, and not suggest lesser-known cuisines. This is the thing that I would be most afraid of because I love trying new things.