CS-370-J7352 Current/Emerging Trends

1-3 Assignment: Short Paper

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To present my problem, I must first give some context into the situation. With rising food cost, here recently I have started cooking at home. For the most part I am a good cook but sometimes I find myself adding too many ingredients, not to the point the food is inedible. So, the solution to my problem where artificial intelligence could assist would be a spice rack that would automatically dispense spices and other ingredients. It could also be built-in to a refrigerator so things such as milk, cereal, or orange juice for instance. Having it all available via voice command would be amazing, spices could be dispensed in little cup and liquid could be dispensed in larger cups. Voice commands would be as simple as telling it that you need two cups of milk, quarter teaspoon of salt & etc.

I don’t really know what all hardware components would be required but I would imagine bins to hold the various ingredients, a funnel for delivering ingredients to cup, some kind of valve system that would open when a particular ingredients needing to be dispensed, a scale for weighing the items out which would be used to determine the amount dispensed, and finally a mechanism that would present the cup that would contain the dispensed items. The problem would be to make it compact enough and cheap enough for consumer use because I could see it being quite pricey. For software, something like a Raspberry Pi running Linux would work great since it has the I/O pins so connecting the various hardware would be easier, having a web interface to which a person could set what ingredients belong to which bins. I don’t think any ethical concerns would be raised because the AI voice commands would be limited to food.