2a.

My computational artifact represents the EQ Radio. The EQ Radio is a device designed by MIT students to determine what kind of emotion someone is feeling, even if they are attempting to hide it. In my picture, the EQ Radio can be seen bouncing wireless signals off of the patient's body and using reflected signals to deduce their heart rate, breathing patterns, and other factors that are symptomatic of certain emotions. Then, it compares the data it has gathered on this patient with the data gathered about other patients to fine tune its result and be more accurate.

2b.

To create my computational artifact representing the EQ Radio, I used the program Microsoft Paint on my school's computers. First, I took an image of the EQ Radio that I had found on Google Images and copy and pasted it into a blank canvas. Next, I found some images of the signals the EQ Radio uses and pasted those into the canvas as well. Then, I drew arrows from each box to a textbox where I explained how the signal contributes to the emotion-reading. Finally, I used the pencil tool to draw the signals bouncing off of an image of a person that I found on Google Images.

2c.

The EQ Radio is a machine designed to read your emotions based off of involuntary changes in your body's behavior, such as an increased heart rate or unsteady breathing. The EQ Radio picks up this information by bouncing wireless signals off of the patient's body and utilizing the information to determine how they are really feeling.This innovation has the potential to do good by helping psychologists to pick up on cues invisible to the naked eye, the cues that they may have missed without the device, and could eventually be used in the healthcare industry to locate signs of depression or anxiety. Also, because the EQ Radio uses wireless signals to analyze patterns such as heartbeat, it is a highly accurate form of non-invasive health monitoring that could be used in many ways in the future, such as for learning about mysterious conditions like arrhythmia, a condition where the heart beats with an irregular or abnormal rhythm. But,

the EQ Radio could also make the people of the future less social. If people started constantly relying on a machine to determine how someone else is feeling, they may lose the ability to communicate and understand emotions without it. Also, if the machine were to be wrong, or if someone was able to fool the machine by faking their actions, then the machine's reliability and accuracy would be questioned. Overall, the EQ Radio can be very beneficial with its medical applications, or be harmful by making people less social.

2d.

The EQ Radio uses data in the form of wireless signals bounced off of a patient's body to determine the patient's heart rate and breathing patterns. Then, it transforms this data by using an algorithm and compares it with data from other patients to ascertain the specific emotion that is afflicting the patient at a given time. In this scenario, the input is the patient's heart rate and breathing patterns, and it is transformed into the output, a display of the emotion the patient is feeling. However, the implementation of this device can raise some data security and privacy concerns. The vast amounts of information could be easily accessed by people with malicious intent, and your medical information could be altered. Cybercriminals could use this information to break into your other accounts and ruin your life. Also, it would be possible for retail companies to find this information and use it to display advertisements pertaining to your personal life even if you did not want them to do so. On top of that, if an insurer where to locate this information, they may increase the rates you are paying for your insurance and make great profits at your expense. But, even though there is lots of potential for negative effects as a result of this innovation, the various medical and psychological benefits far outweigh them.

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