

A Speaking Rate Detection and Feedback

1. What are your thoughts on accuracy of speech recognition system? When does it break?

The system is pretty much accurate when it comes to recognizing voice. For example, it was able to differentiate between my own voice among songs playing in the background. The speech recognition breaks down when a person speaks so fast to the extent that I couldn't illustrate the fast or high speed in the video.

2. Is recognizing words per minute a reliable metric to measuring speaking rate?

I believe that the words per minute rate is pretty good, however, not all words are of the same length and sometimes it might depend on the topic. So, for example while testing the system via readings from the classic novel "To kill a mocking bird", the rate was totally different due to the complexity of words which affects the speed rate. This made the metric not very consistent defining the speaking rate. However, it is still one of the strongest and most commonly used equations when it comes to measuring speaking rates.

3. What are your thoughts on the threshold of 133 words for slow and 188 words for fast?

Actually, 133 words per minutes was slow in real life sometimes they are actually above average speed, but above 188 words was faster than the average daily life conversation. I believe that we could make the average range 133-188 while less than 110 is too slow and above 188 is too fast.

4. What feedback mechanism did you use?

The technique used for rate detection is calculating the number of words every second and then I multiply this number by 60 to get the words/minutes. Then, I ask the system to check the speed every 5 seconds.

B. Automated Agent

1. What are your thoughts on the response of the automated agent? Were they generally appropriate? Why?

The automated agent was very appropriate as it was able to answer all the questions/ tasks properly with minimal error.

2. What technique did you use to make the agent respond appropriately? Why?

I equipped the agent with a list of keywords related to customer service (i.e.: Technical, Product Information...etc.). Afterwards, I asked the agent to scan my words and try to match them with the various services he does and answer accordingly.

3. Do you think that google speech API was good enough for having actual conversations with people? What are your thoughts on automated agents?

The API recognition system was the worst part of the assignment, it had a huge margin of error. Also, it had very slow recognition, which made it sometimes either skip words or break down. However, the automated agent was functioning better and easier to deal with, it doesn't have a delay time responding unlike the API recognition system which had a delay time.

Youtube link: <https://youtu.be/LwA5Ow-ATZE>