

ECE 6183 Paper Report Subject Identification

Speech recognition using Dynamic Time Warping (DTW)

Humans can communicate with each other using sound by identifying each words. Nowadays, as the technology develops, computer has advanced computing ability to support complex algorithms. We can apply DTW algorithm to sound waves of human speech and recognize it using computer.

We use microphones to transform the human speech into digital signals, and using these signals, we can use computers to identify the signals into words. This process can be done in real-time. This technology has been widely used today, such as Siri in Mac OS and Cortana in Microsoft.

In my report, I will talk about the principals of this audio signal processing technology in my own word. I will also talk about the history of this method and its development and application in future.

References

[1] Yurika Permanasari et al 2019 J. Phys.: Conf. Ser. 1366 012091