ASSIGNMENT

Course Code: CSE-498
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Submitted To

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7.27 Some neo-Luddites acknowledge that computing technology is beneficial to many people, but they see the main beneficiaries as government and big business. They say the key question is: Who benefits most? Consider the following questions and discuss the issue of who benefits most. When a drug company develops a new cancer drug and its executives make millions of dollars as the stock goes up, while people who had that cancer live 20 extra years, who benefits most? Who benefits most from social media: governments, businesses, or ordinary users?

Answer: I think the ordinary company are most benefited by this drug. Because, one statistic show, Cancer is a leading cause of death worldwide, accounting for nearly 10 million deaths in 2020 (1). The most common in 2020 (in terms of new cases of cancer) were:

- breast (2.26 million cases);
- lung (2.21 million cases);
- colon and rectum (1.93 million cases);
- prostate (1.41 million cases);
- skin (non-melanoma) (1.20 million cases); and
- stomach (1.09 million cases).

Reference: Ferlay J, Ervik M, Lam F, Colombet M, Mery L, Piñeros M, et al. Global Cancer Observatory: Cancer Today. Lyon: International Agency for Research on Cancer; 2020 (https://gco.iarc.fr/today, accessed February 2021).

This statistic show, how many people are effected by cancer. Per year 10 million death.

7.28 A philosopher writing more than a decade ago argued against the use of speech synthesis. He found it unsettling and dangerous that a person might have a telephone conversation with a machine and think it was a real person. Describe a few uses of speech synthesis. What are the benefits? What are reasons for concern?

Answer: The artificial production of human speech is known as speech synthesis. A speech computer or speech synthesizer is a computer system that is used for this purpose and can be implemented in software or hardware products. A text-to-speech (TTS) system converts text into speech; other systems convert symbolic linguistic representations, such as phonetic transcriptions, into speech. Concatenating pieces of recorded speech stored in a database can be used to create synthesised speech. The size of the stored speech units varies between systems; a system that stores phones or diaphones has the greatest output range but may lack clarity. The storage of entire words or sentences allows for high-quality output in specific usage domains. A synthesizer, on the other hand, can include a model of the vocal tract and other human voice characteristics to produce a completely "synthetic" voice output.

Benefits of speech synthesis:

- Lower Cost. Audio description is typically very costly. ...
- User Control. ...
- Familiarity. ...
- Lack of Tone and Emotion. ...
- No Subjective Judgements. ...
- Pronunciation.

Reasons of concern:

One of the fundamental limitations of speech synthesis is the inability to generate correct prosody and pronunciation from text input. Written text does not contain any emotions, and the pronunciation of proper names and foreign words can be very unusual at times. Speech synthesis is also difficult to create for women's and children's voices. The female voice has a tone that is nearly twice as high as the male voice, and in the case of children, it can be up to three times higher. With a higher fundamental frequency, estimating formant frequency localization becomes more difficult. There are also a number of issues with preprocessing text that contains numbers, abbreviations, and acronyms.

7.29 Speaker recognition software analyzes speech to determine who the speaker is (not what words the speaker is saying, as in speech recognition). Describe some potentially useful and some potentially threatening or risky applications.

Answer: Alexa, Cortana, Google Assistant, and Siri are changing the way people interact with their devices, homes, cars, and jobs. The technology enables us to speak to a computer or device, which interprets what we say and responds to our question or command. Automated telephone systems and medical dictation software were among the first applications for speech recognition.

It is frequently used for dictation, database querying, and commanding computer-based systems, particularly in professions that rely on specialized vocabularies.

7.30 Assume you are a professional working in your chosen field. Describe specific things you can do to reduce the impact of any two problems we discussed in this chapter. (If you cannot think of anything related to your professional field, choose another field that might interest you.

Answer: My chosen field is software development. So, in this field hacker access database so I make an algorithm which encrypted the data store and fetch the data as a result my data have much. I improv the security level in server side scripting.

7.31 Think ahead to the next few years and describe a new problem, related to issues in this chapter, likely to develop from digital technology or devices.

Answer: Based on this chapter on evaluating and controlling technology, I believe that as technology advances, so will unemployment. On the other hand, I believe that if everything is based on technology, our data will be saved in a device or any software application. If the software or the device is damaged, the data will be damaged as well, and we will be in a potentially dangerous situation of losing data.