

30 Lecture - CS101

Important Subjective

1. **What is the primary use of microphones in computer science?**

Answer: The primary use of microphones in computer science is speech recognition.

2. **What is voice control technology, and how does it use microphones?**

Answer: Voice control technology allows users to interact with devices using spoken commands. It uses microphones to capture the user's voice and convert it into commands that the device can understand.

3. **Why are condenser microphones commonly used in music recording?**

Answer: Condenser microphones are commonly used in music recording because of their ability to capture the nuances and details of the sound.

4. **What is acoustic imaging, and how does it use microphones?**

Answer: Acoustic imaging is a technique that captures and analyzes sound waves to gain insights into various phenomena. It uses microphones to capture sound waves.

5. **What is the significance of choosing the right microphone in speech recognition and voice control applications?**

Answer: The accuracy and reliability of speech recognition and voice control technology depend on the quality of the microphone. Choosing the right microphone is essential to ensure the technology functions correctly.

6. **How does noise-canceling technology work in microphones?**

Answer: Noise-cancelling technology filters out background noise to improve the overall audio quality. It does this by analyzing the sound waves and subtracting out any frequencies that do not match the user's voice.

7. **What is the impact of the microphone on the overall sound quality of a recording in music production?**

Answer: The microphone can have a significant impact on the overall sound quality of a recording in music production. The quality of the microphone affects the clarity and detail of the sound that is captured.

8. **What is the significance of microphones in teleconferencing and video conferencing applications?**

Answer: Microphones are used in teleconferencing and video conferencing applications to capture the sound of participants' voices. The quality of the microphone is essential to ensure that participants can hear each other clearly.

9. **What is the significance of microphones in environmental monitoring?**

Answer: Microphones are used in environmental monitoring to capture the sound of animals and birds in their natural habitats. This can provide valuable data on animal behavior and ecosystem health.

10. **What is the role of microphones in virtual and augmented reality applications?**

Answer: Microphones are used in virtual and augmented reality applications to capture the sound of the user's environment and create a more immersive experience.