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Multimodal Interaction Technology


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Contemporary and Forward Looking

Topic 5: AUDITORY INTERFACES



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Basic audio properties

Properties of sound

- Air pressure
- Motion/vibration

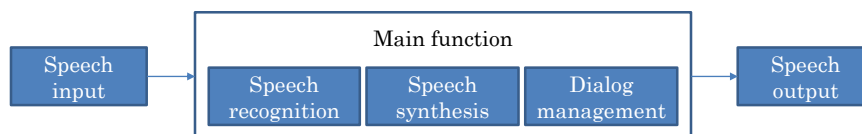
Sensitivity to auditory dimension

- Frequency & pitch
- Loudness
- Timbre
- Spatial location



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Voice-enabled interface



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Auditory application design philosophy

- Communicate efficiently
- Adapt to noisy environments



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Auditory Map

- Conveys location of geographic objects through spatial use of non speech audio to convey information.
- Auditory emoticon using familiar sounds.



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Example of user interfaces

- Virtual Audio Displays (VADs)
- Text-to-speech (TTS) applications.



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THANK YOU

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