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Multimodal Interaction Technology


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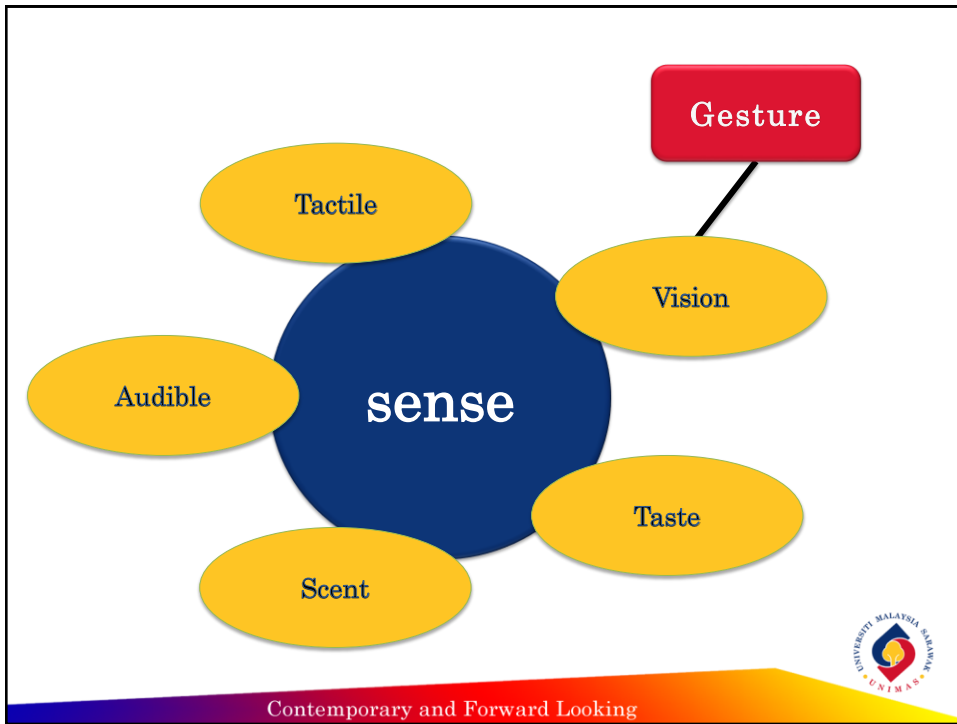


Contemporary and Forward Looking

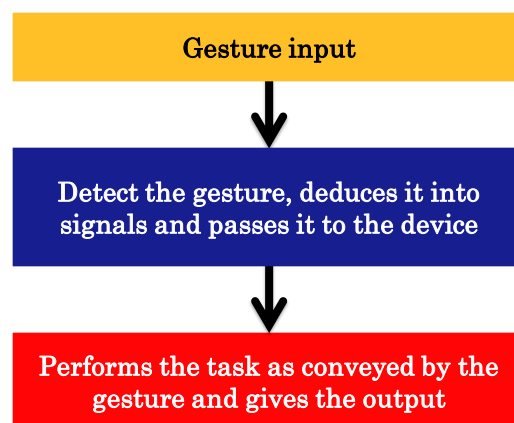
Topic 3: GESTURE INTERFACE



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How basic gesture interface system work?



Gesture-based interface technology

- Gesture-based technology has been booming the past several years.
- Provide convenience in several areas.



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Powerwall display

The 53.7 million pixel Powerwall at the University of Leeds
(Source: <http://en.wikipedia.org/wiki/Powerwall>)



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Areas of applications

- Healthcare
- Education
- Automobile
- Game and entertainment
- Domestic Activities



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Healthcare

- To allow surgeons to use hand and arm movement.
- to change x-ray images and zoom in on details.



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Education

- Game-based learning.
- Attract their attention actively participating in activities.



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Game and entertainment

- User is the controller and has to perform all the physical movements that they desire the character in the game to do.



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Domestic activities

- Domestic is the science that applies computer and robot technologies to domestic appliances.
- Domestic applications can be found in private homes, as well as hotels, offices, etc.



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Domestic activities

- Controlling indoor climate.
- Supporting energy saving and optimized resource management.
- Providing active reminders about meetings, suppliers, tasks.
- Supporting communication among distant family members.



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Advantages of gesture interface

- More natural.
- Without barrier.
- More entertaining.



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Conclusions

- Good way to improve the immersive feeling in a virtual-reality application.
- A good means of making the users' experience feel more natural.



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THANK YOU

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