Communication at Your Fingertip

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“Smart” Wheelchair

- Mobile wheelchair with camera
- Black gloves make virtual mouse click
Let Your Fingers Do the Talking

- Wireless finger mouse
- Communication board
- Text to speech application
Finger Mouse

- Advantages
  - One hand use
  - Wireless
  - Compact

- Design (comfort fit, microprocessor)
Mouse Transmitter/Receiver

- Unique signal between transmitter and receiver
- Works with communication board
Communication Board

- Vocabulary of words and pictures
  - Graphics - Open GL
  - Microsoft Virtual C++
  - Extended selection
Navigation Page
Voice Synthesizer

- Computer “speaks” the phrase selected
  - Microsoft Speech SDK 5.0
  - Text-to-Speech Application
  - Links the icons to the correct phrase
Putting the Pieces Together

- Click the mouse
- To select the phrase
- Hear the phrase spoken

"Hello!"
Acknowledgments

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