**Assistive Robots**

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**Assistive Robots**

- Provide Assistance to Elderly and People with Disabilities to Compensate for Missing Capabilities
  - Maintain/provide independence
  - Important not to take away from what person can do: Encourage to do _more_

**Physically Assistive Robots**

**Assistance for Way Finding**
Social Interaction

Exercise Coach

- Chair-based exercise games
- Humanoid platform
  - Speech, expressions, gestures
- Promote intrinsic motivation
  - Praise & guidance
  - Self-determination (choice)
- Personalize
  - Add user’s name
  - Compare to past performance

Let’s Design an Assistive Robot

- Function:
  - What types of assistance to provide
  - What capabilities needed
- Form
  - Hardware
  - Perception
  - Interface (input/output, verbal & non-verbal)
- Interaction
  - Cross of Interaction
  - Burke’s Pentad