

Robotic Activity Support (RAS)

A Cognitive Assistant for the Smart Home



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Challenge:

- How to help older adults complete daily activities and live independently?

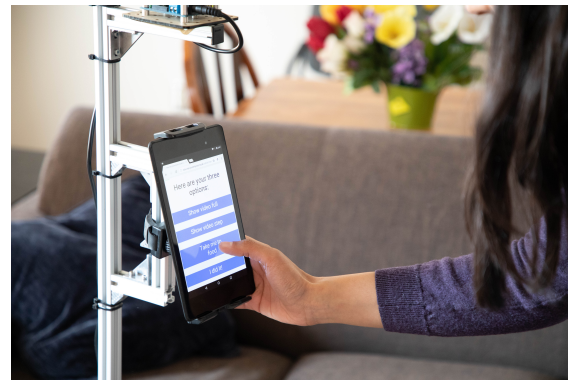
Solution:

- Mobile robotic platform to act as a cognitive aid
 - Help complete activities and find objects
 - A/V prompts on tablet
- Integrate with smart home sensors to detect errors



Above: RAS in the smart home

Below: User interacts with activity prompt



Scientific Impact:

- Understand how robotic assistants can help older adults
- Tie in with environmental sensors

Broader Impact:

- Reduce elder/caregiver burden
 - 50% of adults 85+ need activity assistance
 - Family caregiver burden is high
- Physically present and “aware” vs. traditional electronic reminders