

The Future For Assistive Robotics?

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Assistive Robotics: What Advances Remain?

What problems remain to enable larger-scale success?

- A capable (and cost effective) human-safe robot. Both mobility and manipulation required.
- Intelligence: Robots actions that are robust to variation among humans and environments
 - We can engineer environments (e.g. hospitals), but not humans.
 - Simulation may play a role here.
- Interfaces for both caregivers and care recipients.
 - The ways that care recipients command a robot may differ from how able-bodied people/caregivers/nurses would command the robot.
- Advanced sensing? Related to intelligent robot actions.

The Future for Assistive Robotics?

Two challenging environments: Hospital and Home.

Hospital: More structured.

- Standardized rooms and equipment.

- Trained medical professionals accessible.

- Larger financial budgets for advanced equipment.

Home: Less structure, more variance

I expect the first successes of assistive care robots will be in a clinical setting.