



CPS: Synergy: Collaborative Research: Learning Control Sharing Strategies for Assistive Cyber-Physical Systems

CNS-15544741, 10/1/2015-9/31/2018, NCE: 2/28/2021

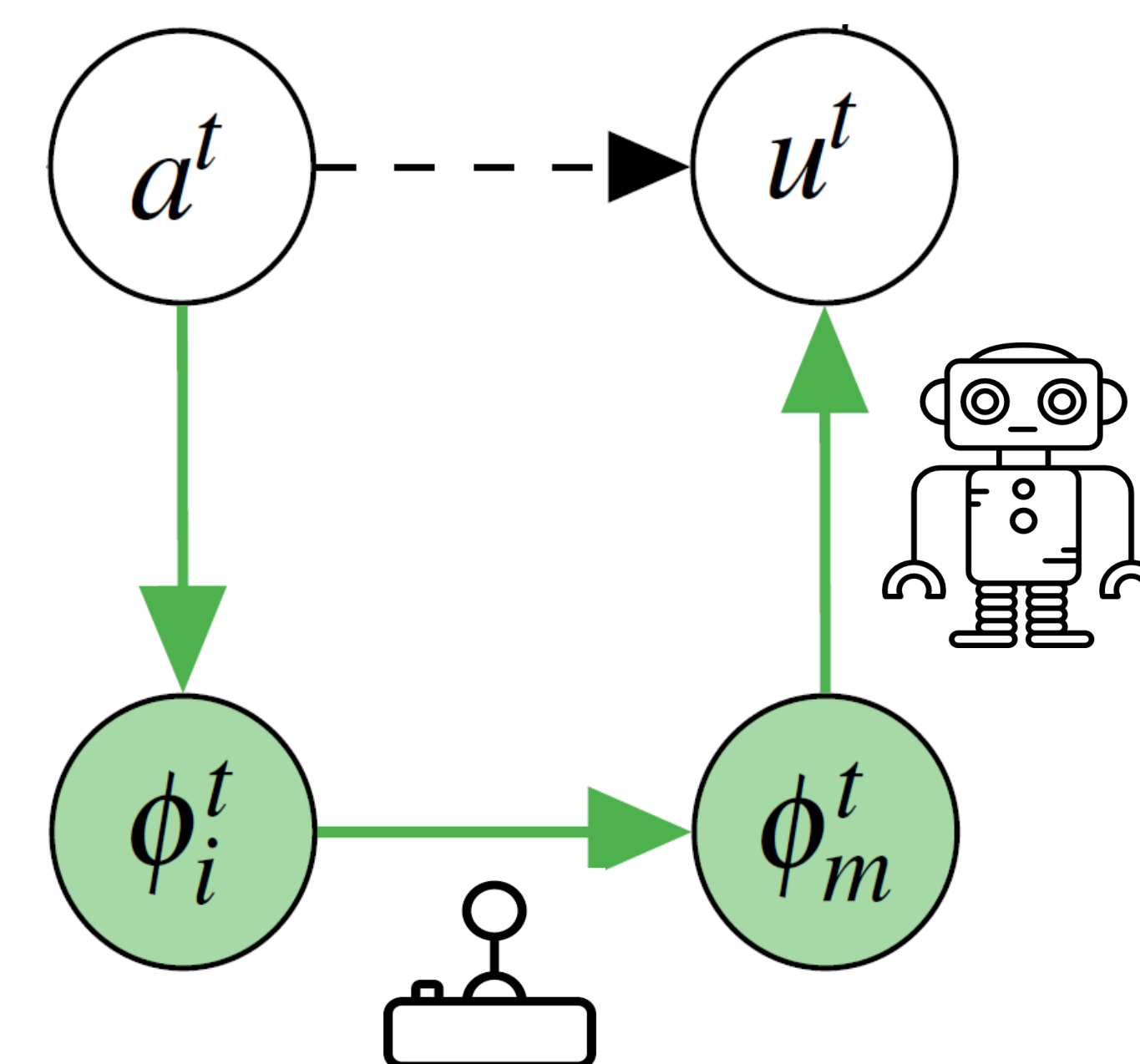
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Challenge:

The control of complex assistive machines, such as robotic arms, via simple low-dimensional control interfaces.

Solution:

- Control mode switching to disambiguate intent.
- Explicit modeling, and inference of, interface-level actions.



Scientific Impact:

- Expanding the repertoire of how automation can provide assistance to operators of complex machines.

Broader Impact:

- Candidate users of assistive robotic arms struggle to control them with accessible low-dimensional interfaces.
- This work provides new avenues for independent manipulation for people with severe paralysis.
- Showcased in annual demos at the Museum of Science and Industry in Chicago.

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