

Improving Human-Robot Collaboration on Assembly Tasks by Anticipating Human Actions

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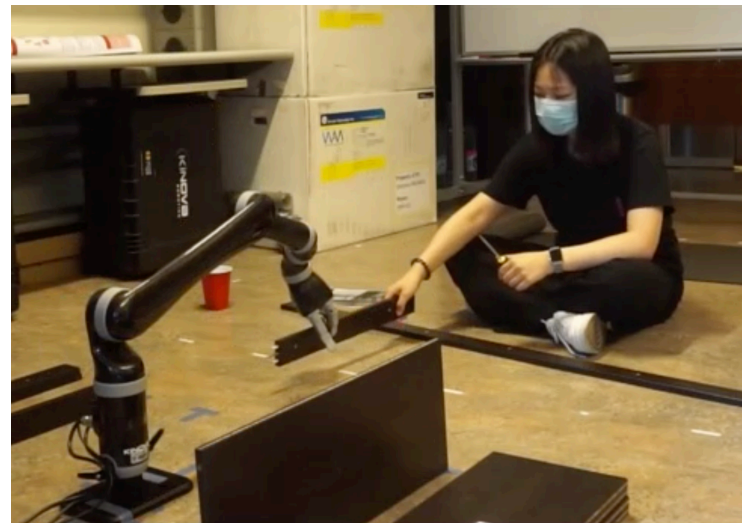
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Challenge

- Infer the preference of a new human operator in a complex task to provide supporting actions

Solution

- Learn dominant preferences from prior demonstrations
- Bring insights from *clickstream analysis* to learn at different levels of abstraction



A robotic assistant infers the preference of a new human operator from previous demonstrations and supports them in the task.

Scientific Impact

- Anticipate human actions and preemptively take supportive actions

Broader Impact

- Include undergraduate and graduate students from PI's courses in research
- Enhance human productivity in hybrid workcells
- Showcase research in large-scale Robotics Open House