

HuggieBot: A Human-Sized Haptic Interface

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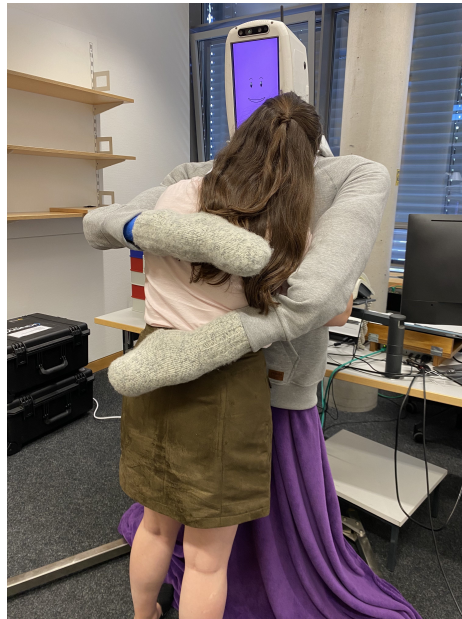


Fig. 1. A user hugging HuggieBot

1 Abstract

How many people have you hugged in these past two years of social distancing? Unfortunately, many people we interviewed exchanged fewer hugs with friends and family since the onset of the COVID-19 pandemic. Hugging has several health benefits, such as improved oxytocin levels, lowered blood pressure, and alleviated stress and anxiety. We created a human-sized haptic interface called HuggieBot to provide the benefits of hugs in situations when receiving a hug from another person is difficult or impossible. In this demonstration, participants of all shapes and sizes can walk up to HuggieBot, enter an embrace, perform several

intra-hug gestures (hold still, rub, pat, or squeeze the robot) if desired, feel the robot's response, and leave the hug when they are ready.

Link to video: https://www.dropbox.com/s/pgbj4po990u7061/HuggieBot_EuroHaptics_Demo_Video.mp4?dl=0

2 Technical Requirements

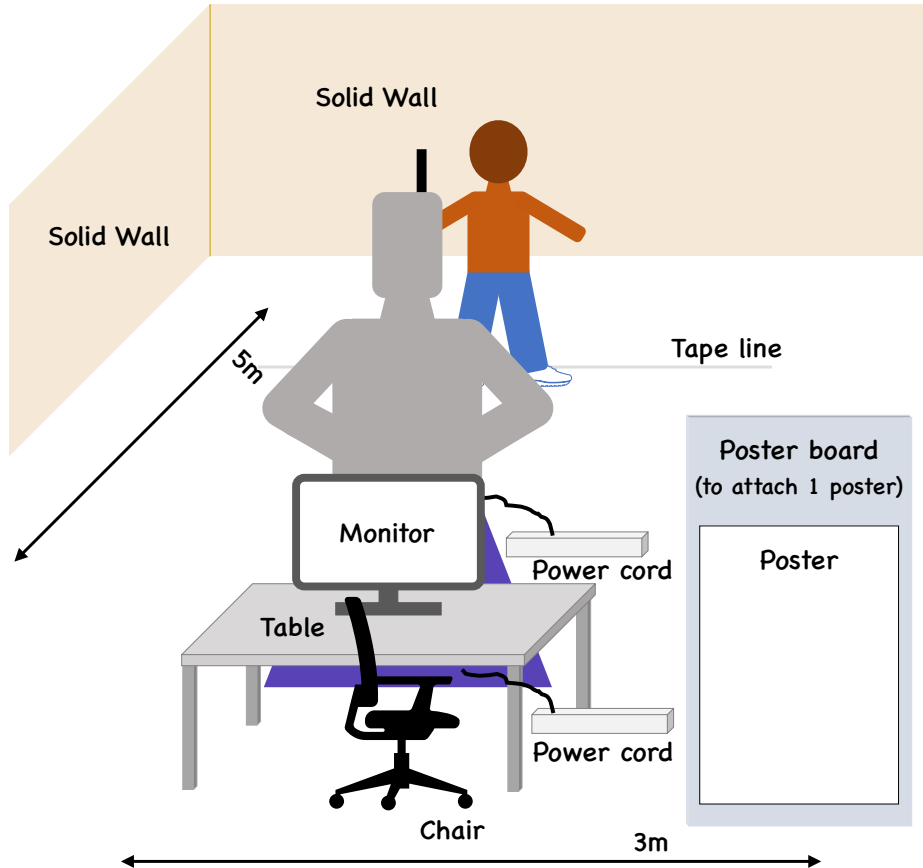


Fig. 2. A mock up image for space planning and technical requirements of the proposed demonstration.

- Two power outlets
- Corner booth of room facing a solid wall
- 5 meters \times 3 meters area
- One table
- One chair
- Masking tape for marking the ground
- Poster board to hang a poster