Human Robot Interaction Study with Haru

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Introduction and Goals

Haru is a social robot created by Honda Research Institute of Japan that we are using to achieve the following goals:

- Create a social desktop robot to help bridge the social gap between children and the elderly.
- Create more sustainable interactions between children and robots in a domestic environment to help integrate robots into everyday life.
- Use the research and feedback from Haru to help improve future HRI (Human Robot Interaction) research endeavors.

Test Environment

Jill's House is an intergenerational housing project in which Haru could bridge interaction between small children and elderly adults. Using games programmed into Haru the children can interact with the elderly residents by interacting with Haru.

Haru

Team

Lead: Dr. Selma Sabanovic
Graduate Researcher: Swapna Joshi and Waki Kamino
Undergraduate Researchers: Zachary Kaufman, Anna Kim, and Arinah Karim

Fall 2020 Work

During this semester we researched Near Field Communication (NFC) technology and its applications with Haru. Specifically, we explored various accessories for Haru that could use NFC chips to cause behavioural changes in Haru. This allows us to find COVID-19 safe ways for the children and elderly to interact with each other through Haru.

Looking Forward

Next semester we plan to continue to do research in HRI. In-person interactive studies are on hold during the COVID-19 pandemic, however we hope to hold studies in Jill's House and Wonderlab Museum as soon as possible. Until then we plan to continue researching NFC technology and it's possible applications in HRI.