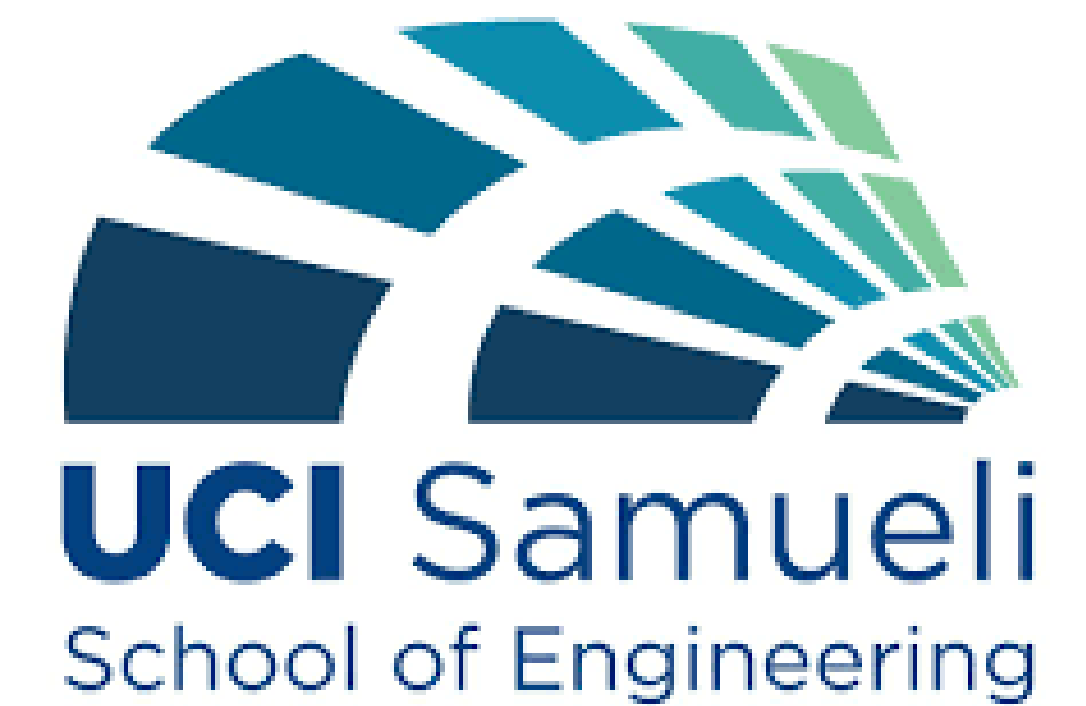




True Reflection: A Smart Mirror

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Purpose

"True Reflection" is a revolutionary new smart mirror that allows people to virtually try on different clothing by talking to the mirror. Clothing and accessories are worn by overlaying the products onto the user's body. The underlying technology beneath this concept is the use of machine learning and computer vision.

Approach

Our current work with "True Reflection" includes a custom-made frame with a two-way glass mirror that has an LCD computer monitor to display user interface from Raspberry Pi. We plan to integrate computer vision, machine learning, and augmented reality to produce a fully functioning smart mirror.

Team Organization

Mentor: Professor Richard Lathrop

Software:
Nima Vasseghi (CSE)

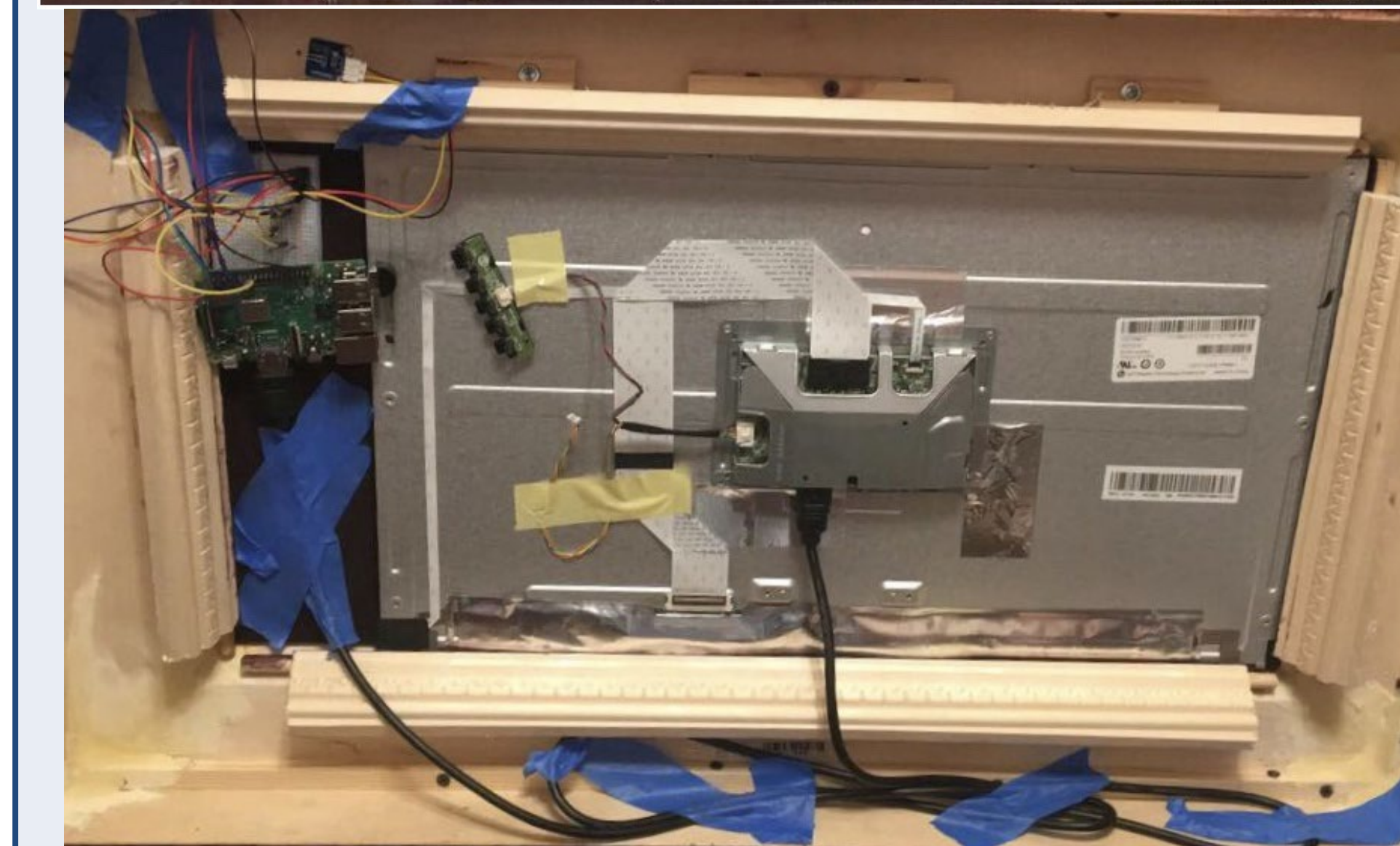
Hardware:
Sherin Stephen (CSE)

Integration:
Iman Elsayed (CSE)

Schedule

Week	Task
1	Work on creating required functionality with Google Cloud Assistant to enable voice activation requests from the user
2	Use JavaScript and CSS to display on the LCD monitor with replies from the Google Cloud Assistant
3	Setup the backend where the input of the Realsense and Google Assistant can be gathered and stored
4	Display input gathered on screen in an organized and systematic way using JavaScript and CSS
5	Display other pertinent information on LCD monitor including weather, time, and calendar events.
6	Set-up the Intel Realsense SDK with the Realsense camera and identify
7	Identify users in each frame, and use Google Vision to recognize different users of the mirror.
8	Scan a potential user's wardrobe and allow the user to choose which item in their wardrobe they want to try on.
9	Implement augmented reality using Unity to display the user's selected dress on the user.
10	Integrate all the different components of "True Reflection" into a complete and working product.

Current Work



Proposed Tools



Contact Information

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Coming Soon!