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Idea 1: The proposed solution could be a ML model integrated with a GUI that is used for medical image manipulation. The ML model in question could be a CNN that works on images and an image processing library could be used to perform the associated operation on the images provided based on the output of the CNN.

Priority: High

Practicality: High since images are less CPU intensive to model

Idea 2: We could capture videos with different backgrounds to reduce model sensitivity to different backgrounds and use a high number of test subjects and sample the videos by some arbitrary frame frequency.

Priority: Low

Practicality: Low since lots of participants will cause sharp increase in RAM requirement. LSTM+CNN has to be implemented which is very highly CPU intensive

Idea 3: The test subjects can be photographed with surgical gloves that will replicate a clinical environment and the finger and hand shapes can be accounted for when obfuscated by gloves.

Priority: Low

Practicality: Medium since the radiology labs may not require gloves to operate images

Idea 4: The coordinate data for the hand’s movement can be extracted and used to find the gesture. The center and extremities can be considered and used.

Priority: Low

Practicality: Low since the coordinate data could be the same for transformed images once rotated, etc.

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**Idea 1: Human - friendly interactions.**

**Instead of number based gestures for accomplishing a task, example., 3 for zooming in, an actual zoom in gesture of spreading thumb and index finger away can be inputted.**

**This way, the person interacting need not remember which number to be used for a particular interaction, but can simply utilize the actions used everyday,making the system user friendly.**

**Priority: High.**

**Practicality: Achievable, as done in other researches and systems.**

**Idea 2:Temporal system instead of Spatital system**

**The proposed idea only accounts to number based gestures, which are static.**

**Instead, the gesture should be an actual representation of the action to be done. Example., moving index finger from right to left for navigating to next page.**

**This needs a motion based input or a video to be processed, rather than a static single image.**

**Hence, RNNs must be utilized instead of CNNs to extract features from the continuous video input.**

**Priority: High**

**Practicality: To achieve the human friendly system as mentioned in idea 3, RNNs must be used, as it must capture the motion of the hand.Achievable as it is present in current systems.**