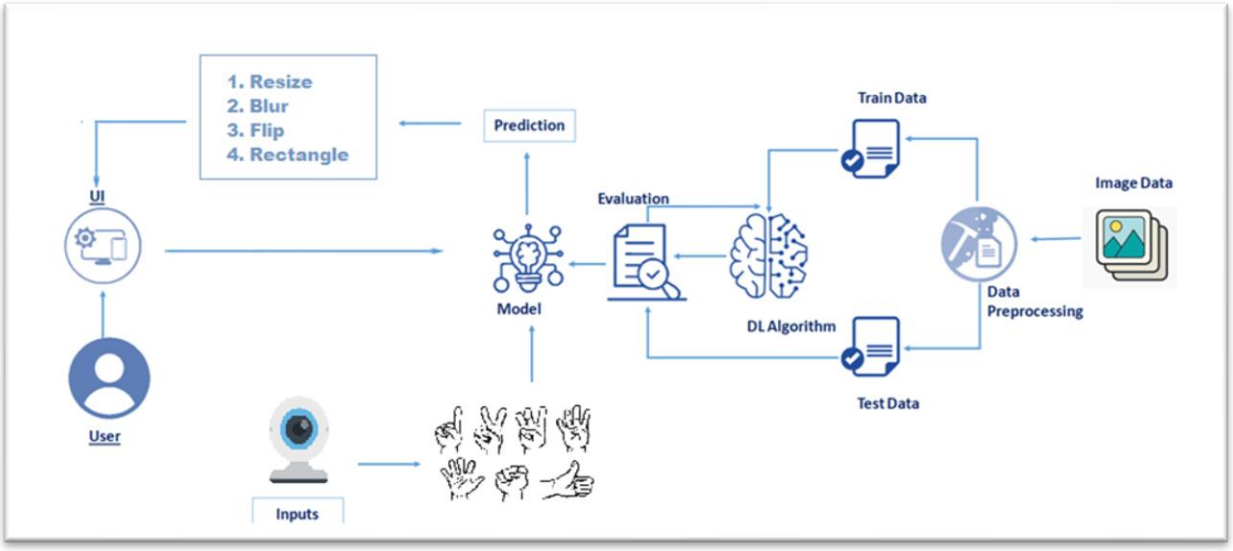
A GESTURE BASED TOOL FOR STERILE BROWSING OF RADIOLOGY IMAGES

PROBLEM STATEMENT

- Humans are able to recognize body and sign language easily.
- This is possible due to the combination of vision and synaptic interactions that were formed along brain development.
- In order to replicate this skill in computers, some problems need to be solved: how to separate objects of interest in images and which image capture technology and classification technique are more appropriate, among others.
- The use of doctor-computer interaction devices in Operation Room requires new modalities that supports medical image manipulation by allowing doctor's hand to remain sterile, supporting their focus of attention, and providing fast response.
- Longer reaction time of the system leads to frustration and therefore to less concentration of the radiologist. However, most errors occurred when performing the confirmation gestures. The sequence was not optimal, because the participants were often confused and used the activation gesture again to confirm instead of the correct confirmation gesture. This longer time leads to more exertion in the shoulder muscle causing fatigue over time.

TECHNICAL ARCHITECTURE



Question	Description
Should AI be used in Health Care?	AI has a doubtless potential to improve healthcare system. Automating tedious tasks can free up clinician schedules to allow for more patient interfacing. Improving data accessibility assists healthcare professionals in taking the right steps to prevent illness.
What are the benefits?	Easier and safer method which more accurate and higher sterile
What are the challenges faced?	It needs lot of training and practice before execution and it need continuous human surveillance. It is also susceptible to security risks.