PROBLEM STATEMENT

Gesture Based Tool For Sterile Browsing Of Radiology Images

- 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.

- The use of doctor-computer interaction devices in the operation room (OR) requires new modalities that support medical imaging manipulation while allowing doctors' hands to remain sterile, supporting their focus of attention, and providing fast response times.

- This paper presents "Gestix," a vision-based hand gesture capture and recognition system that interprets in real-time the user's gestures for navigation and manipulation of images in an electronic medical record (EMR) database.

- Navigation and other gestures are translated to commands based on their temporal trajectories, through video capture. "Gestix" was tested during a brain biopsy procedure.

- In the in vivo experiment, this interface prevented the surgeon's focus shift and change of location while achieving a rapid intuitive reaction and easy interaction. Data from two usability tests provide insights and implications regarding human-computer interaction based on nonverbal conversational modalities.

I am	I'm trying to	But	which makes me feel
Surgeon	convey my point of view in form of gesture	difficult to refer guide books	Frustrated
Common people	know whether sign language is easy or not	it contains new vocabulary	Anxious
Student	do project on it	don't know were can i found its requirements	confused