LITERATURE SURVEY

PROJECT NAME:A Gesture-based Tool for Sterile Browsing of Radiology Images

S.NO.	Title	Author name	Publication and year	Abstract	Method
1.	A Gesture-based tool for sterile browsing of radiology images	Juan P. Wachs, PhD, Helman I. Stern, PhD, Yael Edan, PhD,Michael Gillam, MD, Jon Handler, MD, Craig Feied, MD, PhD, and Mark Smith, MD	Journal of the American Medical Informatics Association. Year- 2008	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.	Gestix
2	A non-contact mouse for surgeon-computer interaction.	Grätzel, C. Fong, T.; Grange, S. Baur, C.	Technology and Health Care, vol. 12, no. 3, pp. 245-257, 2004 Year- 18 August 2004	Developed a system that uses computer vision to replace standard computer mouse functions with hand gestures. The system is designed to enable non-contact human-computer interaction (HCI), so that surgeons will be able to make more effective use of computers during surgery.	vision-based interface, hand gesture recognition
3	Real-Time Hand Gesture Interface for Browsing medical images.	Juan Wachs,Helman Stern,Yael Edan,Michael Gillam,Craig Feied,Mark Smithd &Jon Handler	International Journal of Intelligent Computing in Medical Sciences & Image Processing.	A color distribution model of the gamut of colors of the user's hand or glove is built at the start of each session resulting in an independent system. The gesture system relies on real-time robust tracking of the user's hand based on a color-motion fusion model, in which the relative weight applied to the motion and color cues are adaptively determined according to the state of the system. Dynamic navigation gestures are translated to commands based on their relative positions on the screen. A state machine switches between other gestures such as zoom and rotate, as well as a sleep state. Performance evaluation included gesture recognition accuracy, task learning, and rotation accuracy. Fast task learning rates were found with convergence after ten trials.	A vision based gesture capture system.

| 4 | Bacterial contamination of computer keyboards in a teaching hospital. | Maureen Schultz, Janet Gill, Sabiha Zubairi, Ruth Huber and Fred Gordin | Cambridge University Press

Year- 02 January 2015 | We tested 100 keyboards in 29 clinical areas for bacterial contamination. Ninety five were positive for microorganisms. *Streptococcus, Clostridium perfringens, Enterococcus* (including one vancomycin-resistant *Enterococcus*), *Staphylococcus aureus*, fungi, and gram-negative organisms were isolated. Computer equipment must be kept clean so it does not become another vehicle for transmission of pathogens to patients. | Bacterial contamination. |