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## Gesture-Based Interaction in Medical Interfaces

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### Abstract

The latest generation of medical visualizations systems that provide gesture based interaction usually rely on closed source software modules. This paper presents a novel approach since the interaction with the rendered 3D images is done via a web browser. The entire system is based on open source software components and this way eliminates the requirement to have a specific operating system preinstalled. Our team used a Leap Motion controller that allows the rotation, panning, scaling and selection of individual slices of a reconstructed 3D model based on a prior CT (Computed Tomography) or MRI (Magnetic Resonance Imaging) scan of a patient. The results showed that is feasible to build such a system and that the interaction with the model can be done in real-time. It was concluded that this web oriented architecture could provide a sustainable alternative for interacting with medical images.

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