CFD-AR(T)

==Augmented reality for visualization of CFD simulations==

=2.3 Augmented reality= Augmented reality (AR) is one of the emerging technologies of the last years; with the help of augmented reality digital elements are placed over the ”real world”, merging the ”real world” with a digital extension. It differentiates itself from virtual reality (VR) since VR is an isolated experience from the ”real world”. There exist two types of augmented reality: marker-based and marker-less. This paper will only cover marker-based AR. Marker-based AR reference objects are needed to place the digital objects, for this, image recognition is used; with the help of a camera, the AR implementation will recognize patterns, colors, and characteristic features. It will later compare the detected object with its information bank. Once a match has been found, it uses algorithms to determine the pose and place the digital object in the right spot.