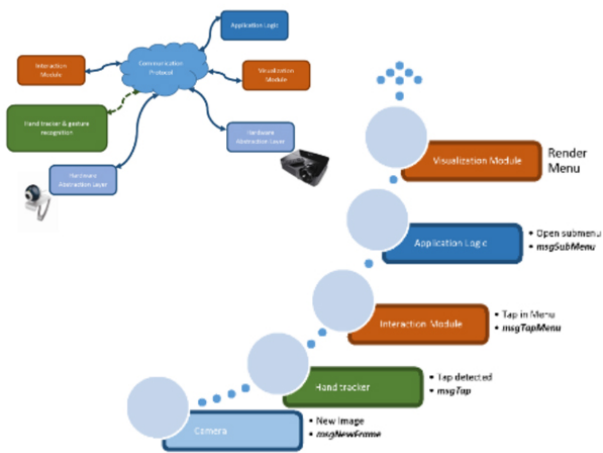


# Development of general-purpose projection-based Augmented Reality Systems

Sunet, Marc; Comino, Marc; Karatzas, Dimosthenis; Chica, Antoni; Vazquez, Pere-Pau



Despite the large amount of methods and applications of augmented reality, there is little homogenization on the software platforms that support them. An exception may be the low level control software that is provided by some high profile vendors such as Qualcomm and Metaio. However, these provide fine grain modules for e.g. element tracking. We are more concerned on the application framework, that includes the control of the devices working together for the development of the AR

experience. In this paper we describe the development of a software framework for AR setups. We concentrate on the

modular design of the framework, but also on some hard problems such as the calibration stage, crucial for projection-based AR. The developed framework is suitable and has been tested in AR applications using camera-projector pairs, for both fixed and nomadic setups.