Multiplatform **Augmented Reality** Factory

aura is designed to ease the development process of Augmented Reality applications, giving priority to performance, stability and flexibility. It's a useful and effective tool both for expert designers, thanks to its programming interfaces, as for end users as it includes simple and intuitive configuration editors.

Its main features are:

- **Multiplatform** (Windows, iOS, Android, Linux)
- **High performance:** optimized for mobile devices
- **Flexible:** designed to perform tracking by different artificial vision methods (natural markers, CAD models, SLAM) and to use different image descriptors (based on texture, edges…)
- **Efficient:** possibility to perform cloud computing transparently to the user

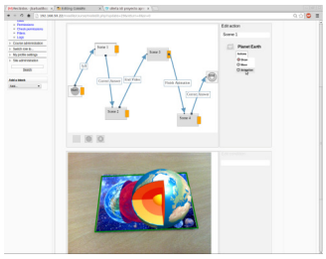
Applications

- **Educational/Training environments**
- **Tourist guides**
- **Industry**
- **E-commerce**
- **Gaming**
- **Architecture/design**
- **Advanced services**

Use Cases

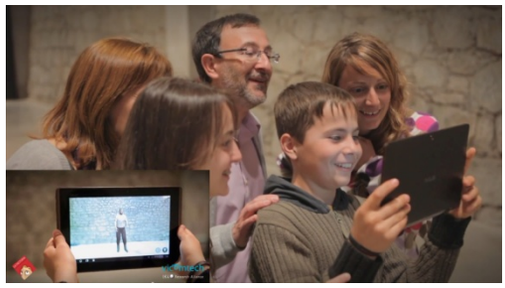
LeARning

Advanced tool to create training courses supported by Augmented Reality



avatAR

Enriched tour guiding app through storytelling and avatars

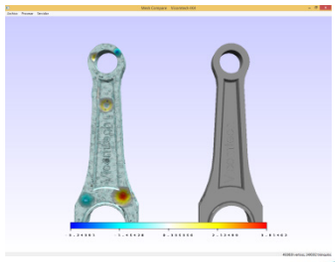


CoolTour

Engine for markerless augmented cultural experiences

FlexmARker:

Flexible and scalable product configurator based on markers



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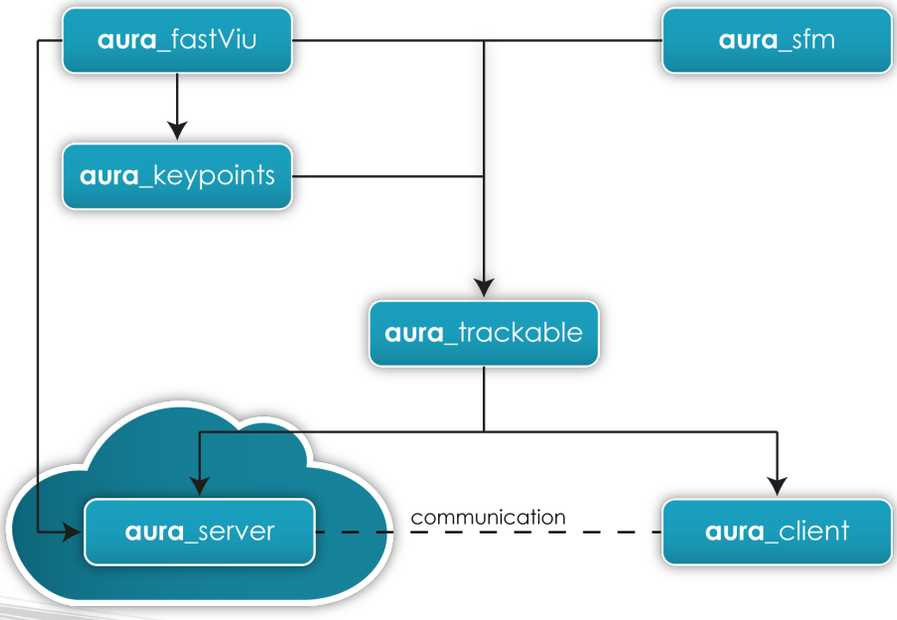
Aura Modules and Architecture

Module	Description	Platforms *Minimum requirements
aura_ keypoints	Function set to detect the features of an image and to describe the descriptors	Android 4.0 IOS 7.0 Windows XP Linux
aura_ trackable	Function set which abstract the designer from the vision technique to use, allowing natural markers, SfM and SLAM homogeneously	
aura_ sfm	Function that allows 3D reconstruction of an environment from images to be used with SfM and SLAM algorithms	
aura_ fastViu	Augmented vision functions optimized to run on ARM processors	
aura_ server	Server features and utilities for applications running in client-server mode	
aura_ client	Client features and utilities for applications running in client-server mode	



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