

DESARROLLO DE APLICACIONES DE AR USANDO EL SDK DE VUFORIA

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CENTRO DE DESARROLLO DE SOFTWARE (CEDESOF)



¿QUÉ PENSAMOS QUE ES LA REALIDAD AUMENTADA?

PRIMEROS
CONCEPTOS

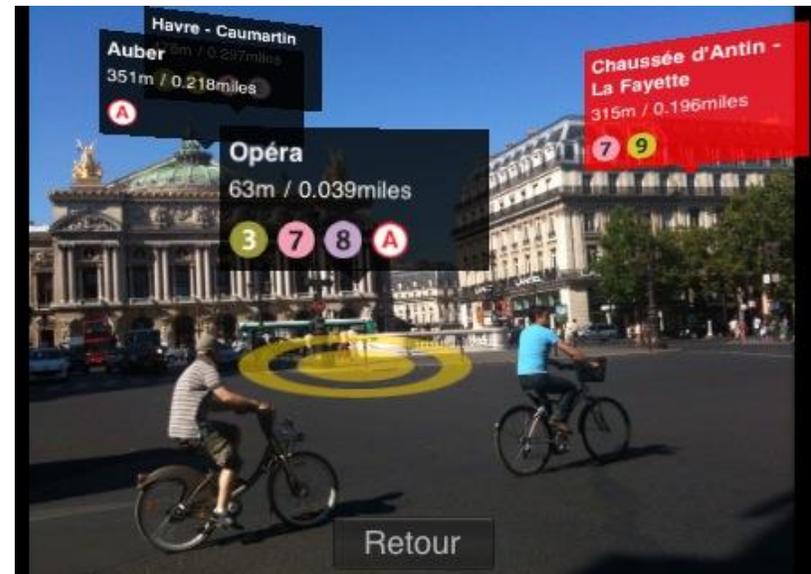
AR



PRIMEROS CONCEPTOS

AR

LA REALIDAD AUMENTADA ES :



PRIMEROS INDICIOS

Introducing . . .

sensorama

The Revolutionary Motion Picture System
that takes you into another world
with

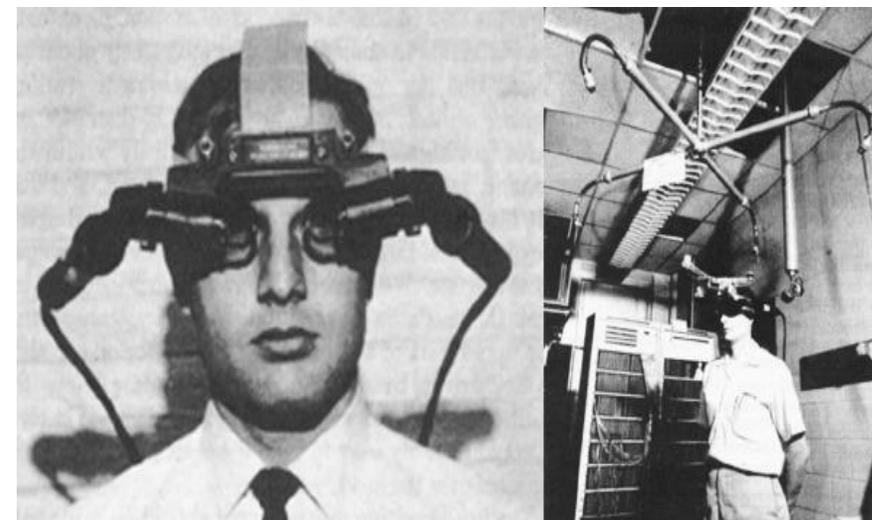
- 3-D
- WIDE VISION
- MOTION
- COLOR
- STEREO-SOUND
- AROMAS
- WIND
- VIBRATIONS



○ PATENTED

SENSORAMA, INC., 855 GALLOWAY ST., PACIFIC PALISADES, CALIF. 90272
TEL. (213) 459-2162

Los primeros indicios de se encuentran en el mundo cinematográfico y en la fotografía. Su nacimiento fue en los años setenta (Arroyo-Vázquez, 2011), con inventos como el “Sensorama” y el “head-mounted Display”.



USOS: Educación



USOS: Juegos



USOS: Ingeniería



USOS: Publicidad



- 15 Millones de usuarios
- 10,000 Desarrolladores
- En el 2014, cada Smartphone debe tener AR.

¿ PORQUÉ DEBERÍA PROGRAMAR APLICACIONES AR?

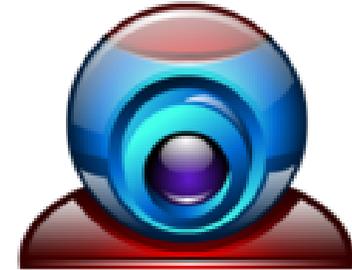


ELEMENTOS DE UNA APLICACIÓN REALIDAD AUMENTADA

MONITOR O
DISPOSITIVO MÓVIL.



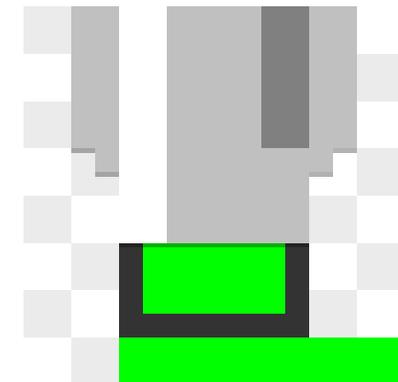
CAMARA WEB



SOFTWARE

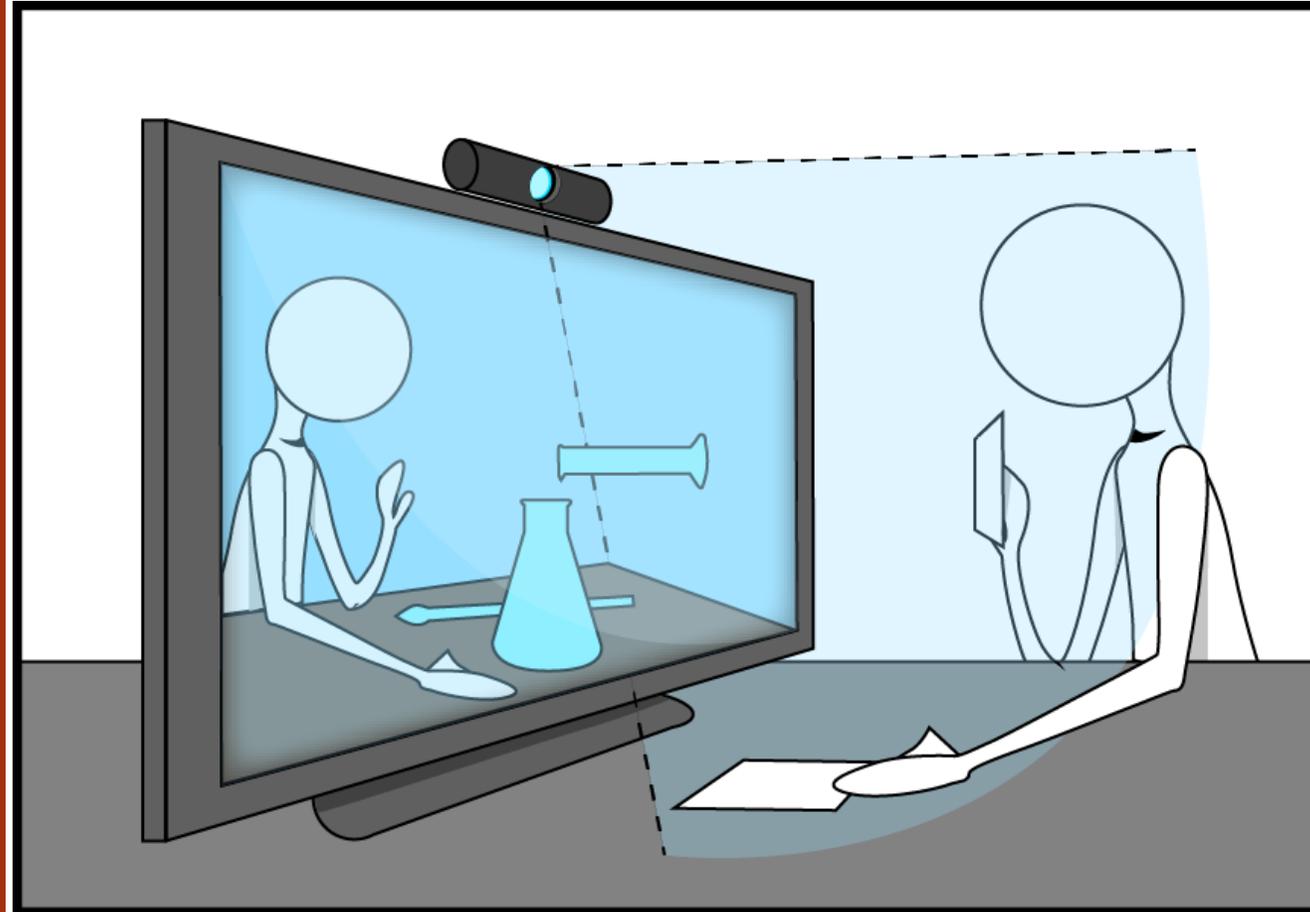


MARCADORES



**1. DISPOSITIVOS
MÓVILES O
MONITOR**

2. CAMERA



SOFTWARE

STRING (IOS)

STRING

APP de Desarrollo para IOS.
Markers
IOS Interface (Cocoa Touch)
Corre en minutos.

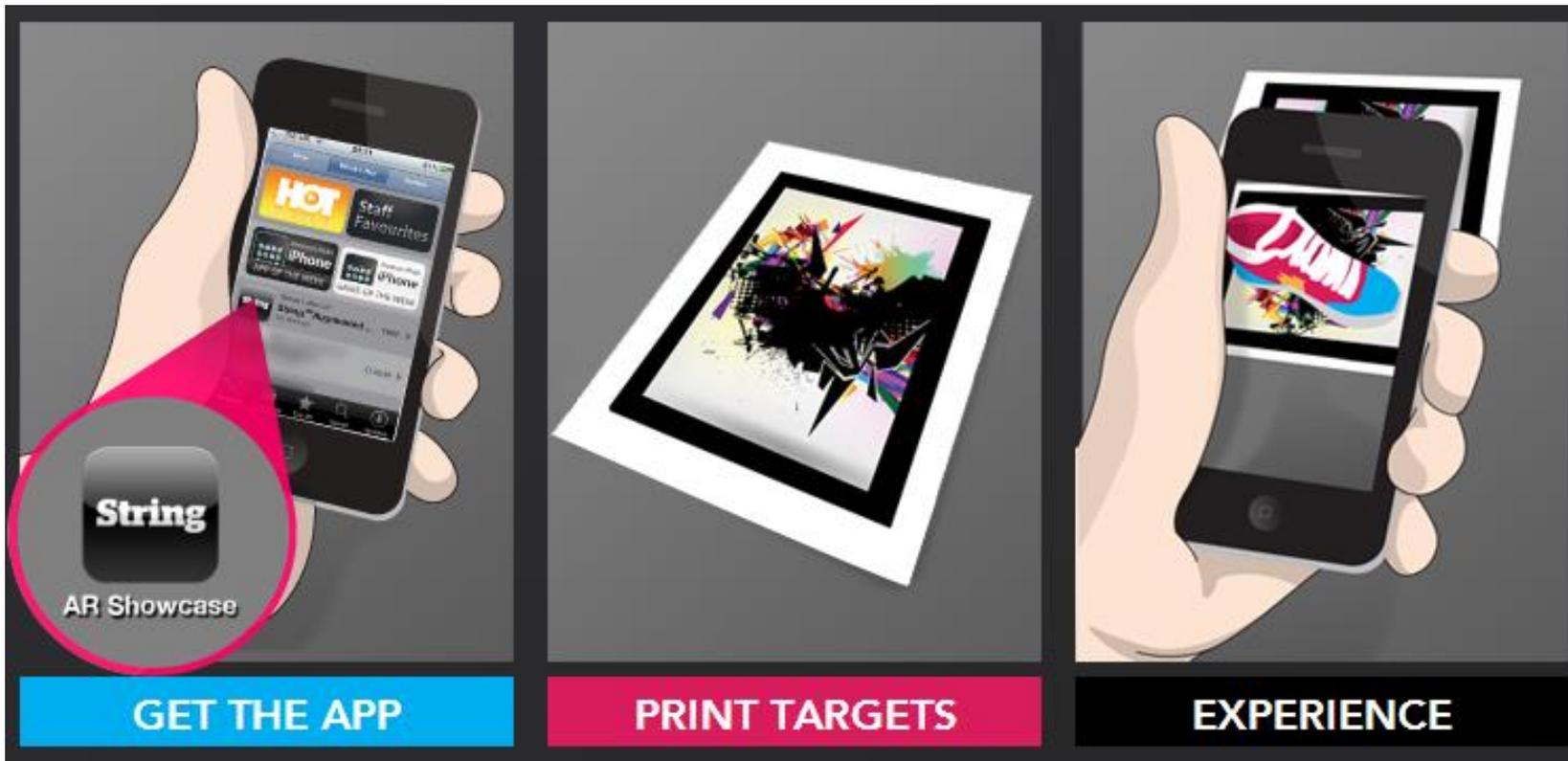


REQUIREMENTS

Compatible with iPhone, iPod touch (4th generation), iPod touch (5th generation), iPad 2 Wi-Fi, iPad 2 Wi-Fi + 3G, iPad (3rd generation), iPad Wi-Fi + 4G, iPad (4th generation), iPad Wi-Fi + Cellular (4th generation), iPad mini and iPad mini Wi-Fi + Cellular. Requires iOS 4.0 or later.

SOFTWARE

STRING (IOS)



The image consists of three vertical panels illustrating the String app workflow. The first panel shows a hand holding an iPhone displaying the app's interface, with a red callout bubble containing the 'String' logo and the text 'AR Showcase'. Below this panel is a blue button labeled 'GET THE APP'. The second panel shows a hand holding a printed target with a colorful, abstract graphic. Below this panel is a red button labeled 'PRINT TARGETS'. The third panel shows a hand holding an iPhone displaying the AR experience, with a colorful, abstract graphic overlaid on the screen. Below this panel is a black button labeled 'EXPERIENCE'.

<http://www.poweredbystring.com/showcase>

SOFTWARE

METAIO

• REQUERIMIENTOS

- Visual Studio 2010
- Web Cam

• CARACTERÍSTICAS

- Soporte para renderización 3D.
- Reconocimiento de imágenes.
- Multiplataforma.

COSTOS

- SDK PRO APPS \$5,490.
- SDK Basic APPS \$3,490.



SOFTWARE

METAIO



Metaio Cloud App

Licensing Options ▶



Desktop App

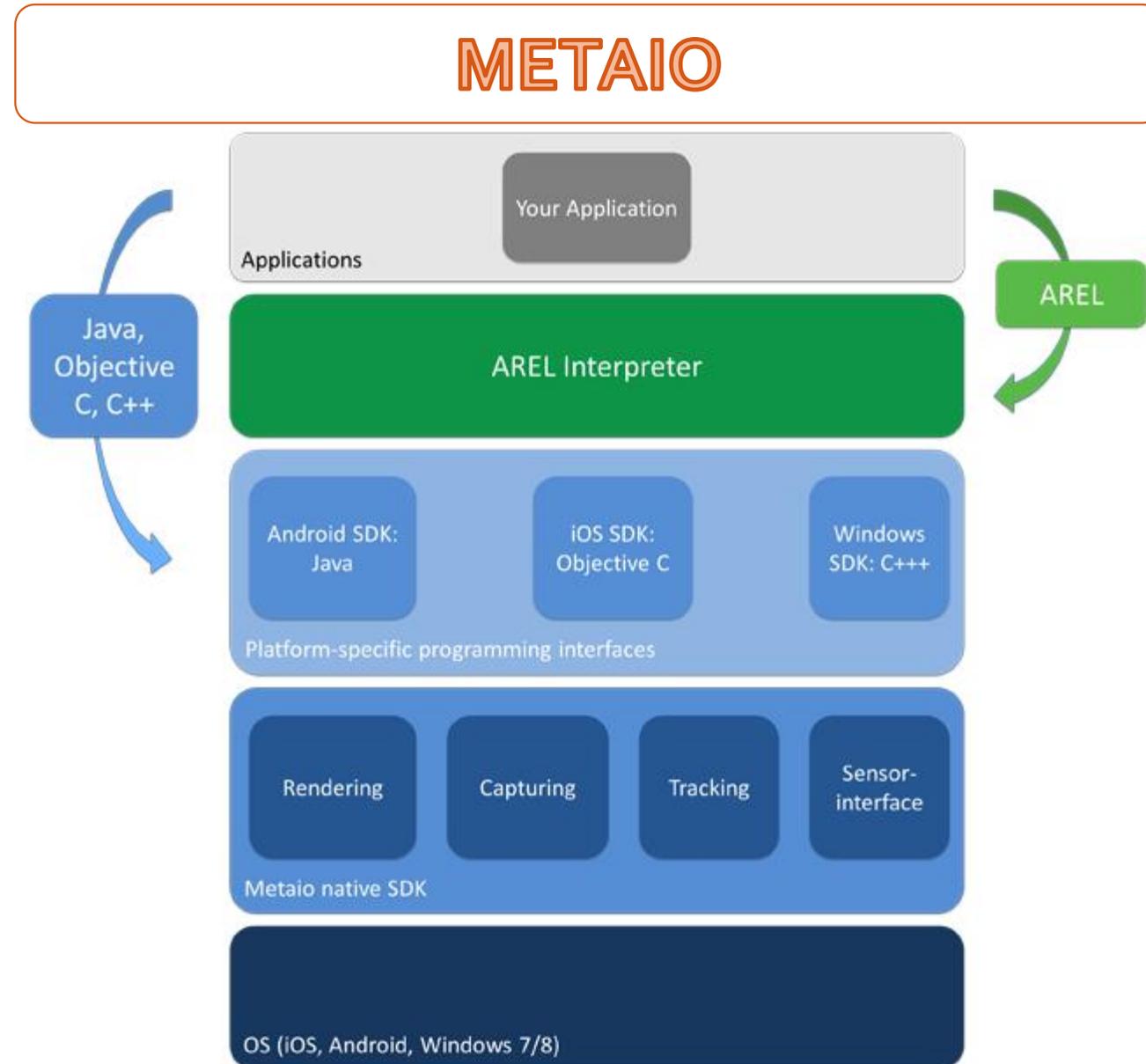
Licensing Options ▶



Metaio SDK App

Licensing Options ▶

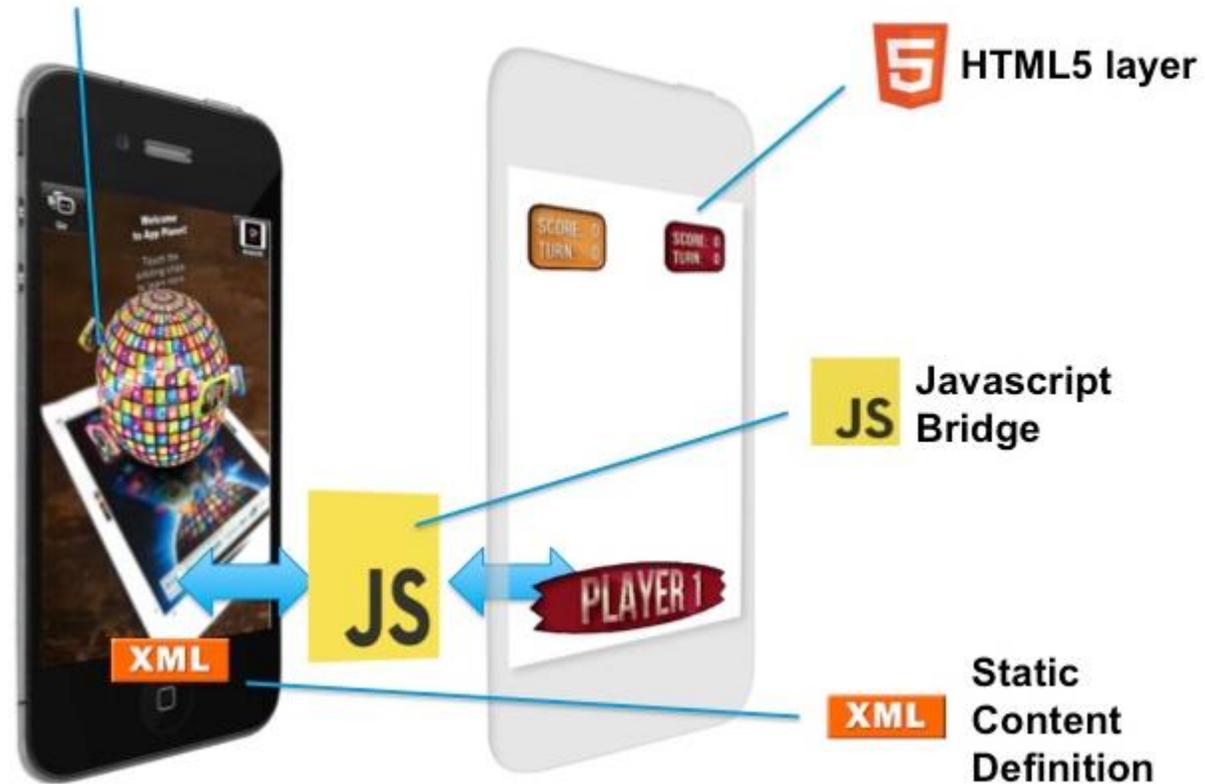
SOFTWARE



SOFTWARE

JUNAIO

 metaio SDK



SOFTWARE

SDK de Qualcomm's Augmented Reality (Android e IOS)



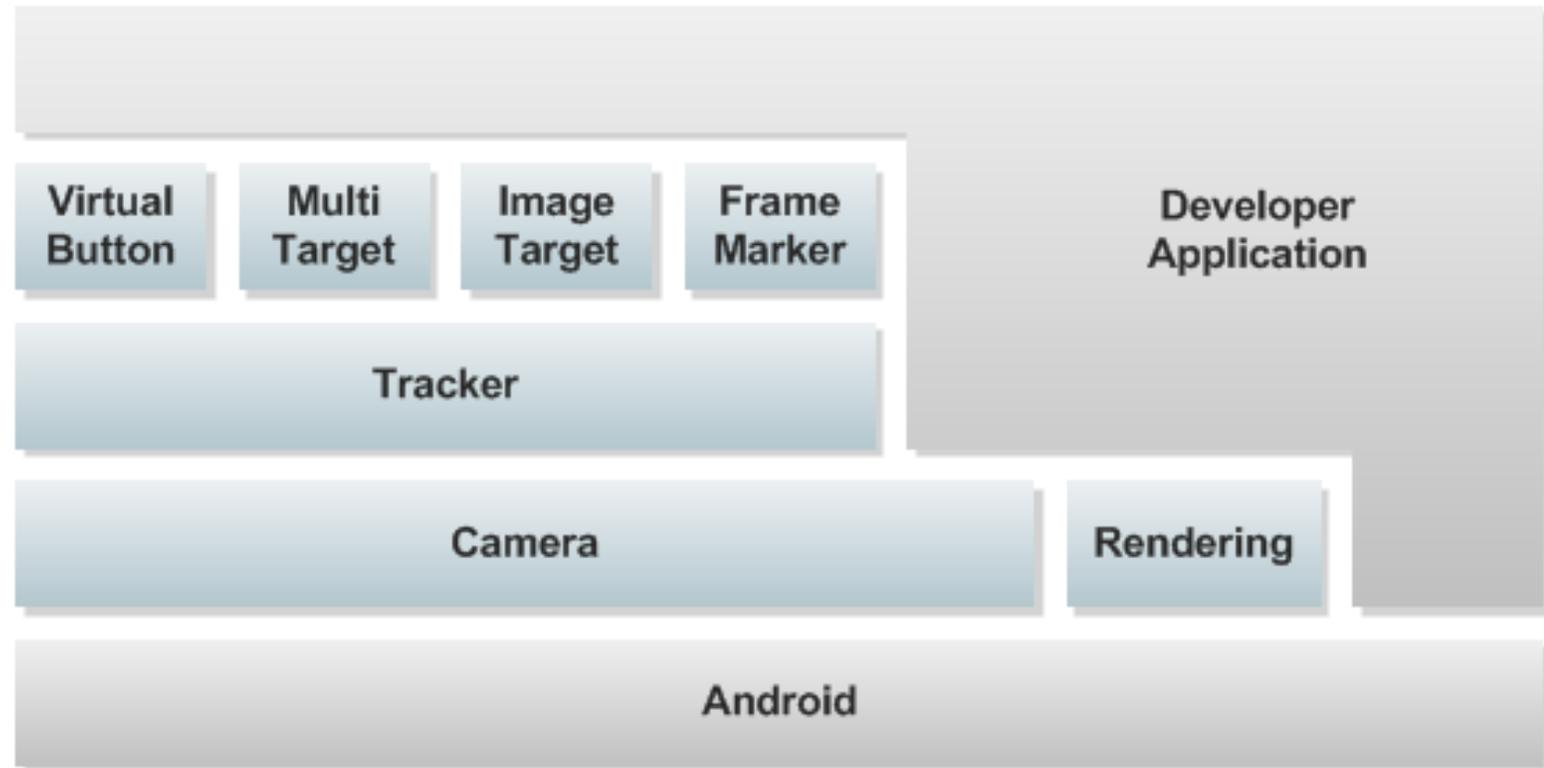
Soporte para IOS, Android y Unity 3D.

Desarrollo:

1. Seleccionar Objetos del Mundo Real
2. Diseño 3D(Maya, 3Ds Max y Blender)
3. Construcción (Xcode, Eclipse y Unity).

SOFTWARE

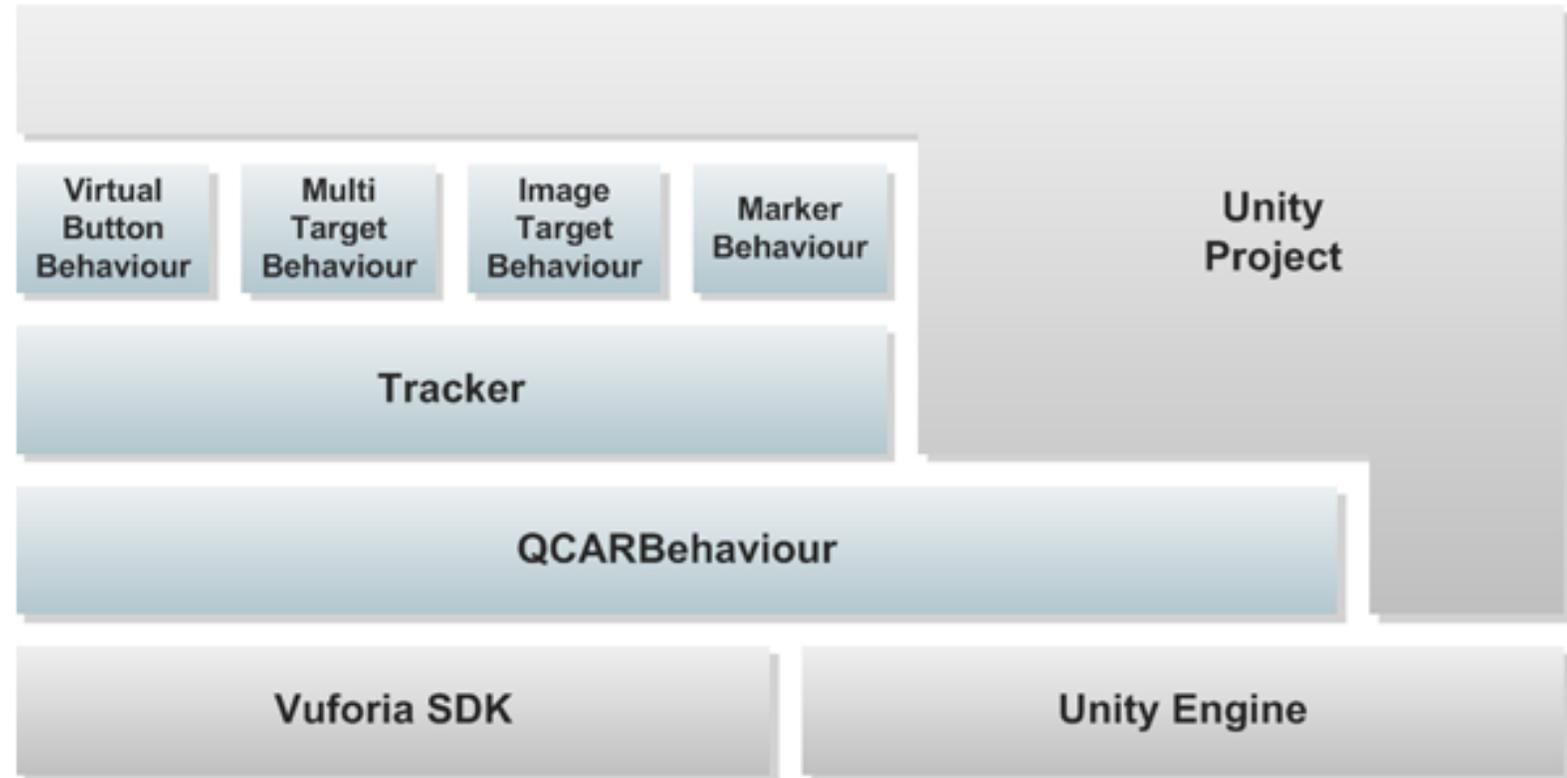
SDK de Qualcomm's Augmented Reality (Android)



High-level system overview of Vuforia SDK

SOFTWARE

SDK de Qualcomm's Augmented Reality (Unity)



High-level system overview of Vuforia SDK Unity Extension

VUFORIA SDK

SDK de Qualcomm's Augmented Reality



Discover The Power Of The Cloud

Vuforia cloud recognition allows your app to see more than 1 million images

[Learn More](#)

VUFORIA SDK

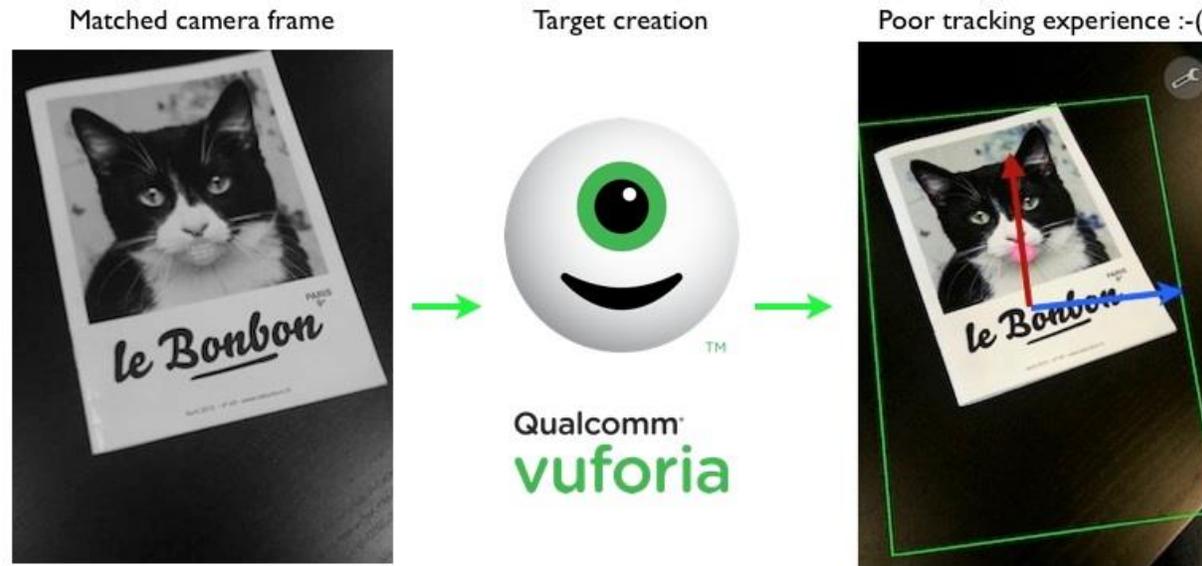
SDK de Qualcomm's Augmented Reality (INSTALACIÓN)



CAMERA

SDK de Qualcomm's Augmented Reality

La cámara de Vuforia, captura la vista y la pasa al TRACKER.

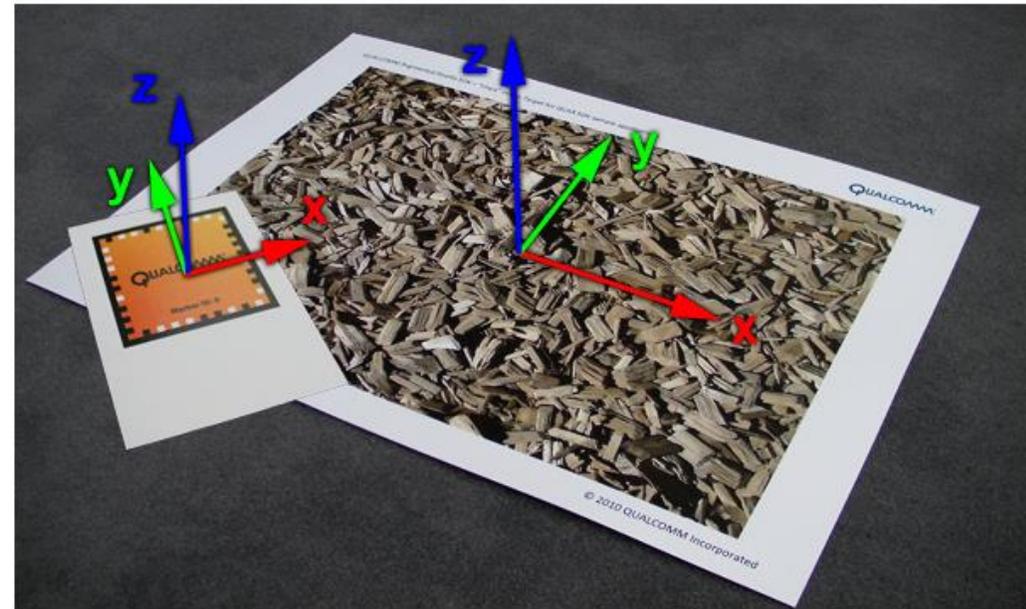


TRACKER

SDK de Qualcomm's Augmented Reality

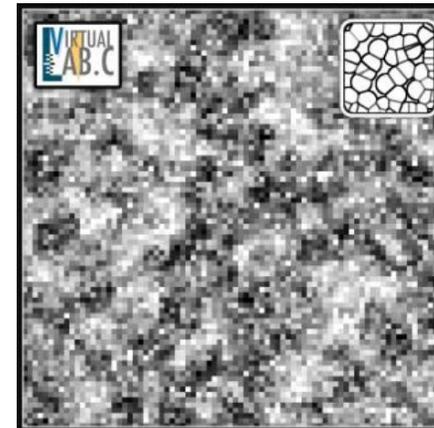
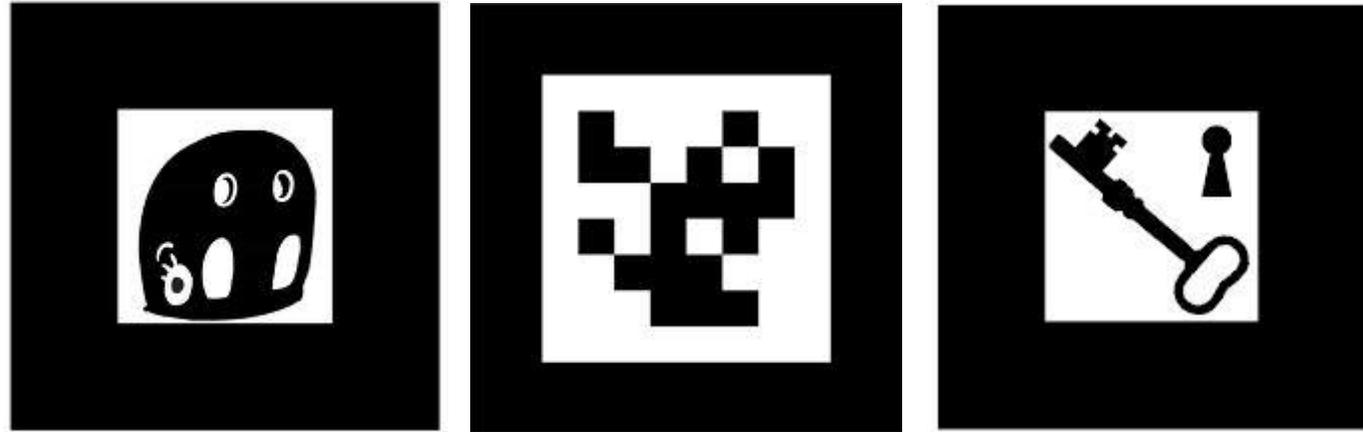
Son algoritmos de visión que permiten a un dispositivo detectar y rastrear objetos del mundo real en los marcos de la cámara de video.

Detección de marcadores y la evaluación de los botones virtuales. El TRACKER puede detectar varios conjuntos de datos al mismo tiempo.



EVALUACIÓN DE MARCADORES

SDK de Qualcomm's Augmented Reality Reality



EVALUACIÓN DE MARCADORES

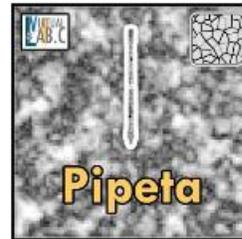
SDK de Qualcomm's Augmented Reality

Target Manager

Device Databases (1)

[Cloud Databases](#)

Create Database



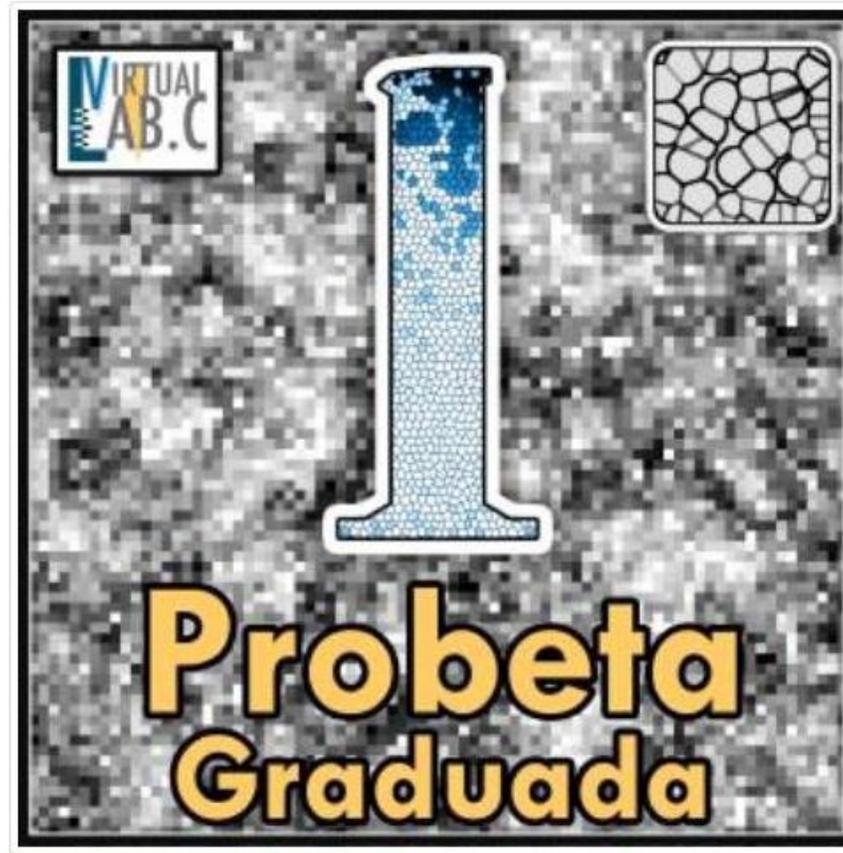
LabVirtual

4 Targets

Modified Jul 30, 2013

EVALUACIÓN DE MARCADORES

SDK de Qualcomm's Augmented Reality



Target ID: aa9a3ed7c7f84838b8dcf23eeb7f4306

Augmentable: ★★★★★ ⓘ

Add

Modif

Target

An augmentable rating determines the detection and tracking of the image. To improve the rating, consider increasing the features, improving feature distribution, increasing local contrast, and/or whether your image has repetitive patterns. [Learn More >](#)

DEMOSTRACIÓN

SDK de Qualcomm's Augmented Reality



[vuforia-unity-android-ios-2-6-7.unitypackage](https://developer.vuforia.com/resources/sdk/unity_android/windows/vuforia-unity-android-2-6-7.unitypackage)

[https://developer.vuforia.com/resources/sdk/unity_android/windows/vuforia-unity-android...](https://developer.vuforia.com/resources/sdk/unity_android/windows/vuforia-unity-android-2-6-7.unitypackage)



[UnitySetup-4.0.0.exe](http://download.unity3d.com/download_unity/UnitySetup-4.0.0.exe)

http://download.unity3d.com/download_unity/UnitySetup-4.0.0.exe

DEMOSTRACIÓN



Desarrollo de Aplicaciones de AR usando el SDK de Vuforia.

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