

**Vuforia**<sup>TM</sup>

# **BUILDING A VUFORIA APP FOR HOLOLENS**

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# AGENDA

- Vuforia Introduction
- Vuforia HoloLens Experiences
- How to build the Vuforia HoloLens demo



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# VUFORIA

The leading AR platform

A simple API describes what is in the camera's FOV, and where

- Images
- Objects
- Text
- Meshes



# VUFORIA MARKET TRACTION



25K

+

COMMERCIAL  
APPS

230K

+

REGISTERED  
DEVELOPERS

260M

+

APP  
INSTALLS

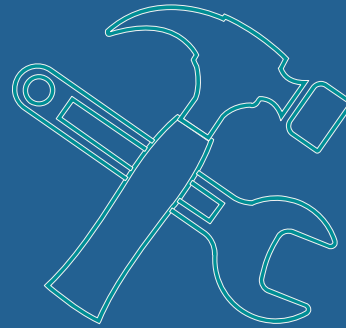
# PLATFORM COMPONENTS



## Vuforia Engine

### Supported Devices

- Phones & Tablets - Android & iOS
- Eyewear - Samsung Gear VR, Epson-BT 200, ODG R-6/7
- Support for Unity, Xcode, Android Studio



## Tools

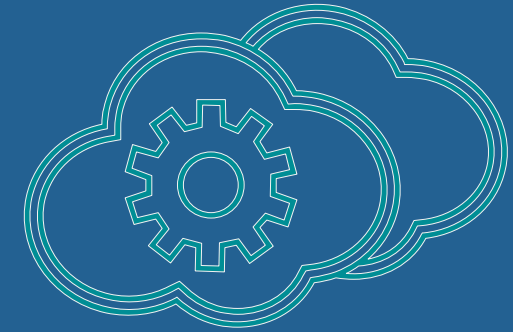
### Target Manager

- Create & Manage databases for use on device or cloud

### Vuforia Object Scanner

- Scan objects such as toys to create Object Targets

### Eyewear Calibration



## Cloud Services

### Vuforia Cloud Recognition Service

- Allows use of cloud reco database with up to 1 million targets

### Vuforia Web Services

- RESTful APIs to manage cloud-based target databases

# VUFORIA UWP SUPPORT

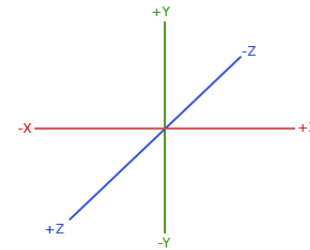
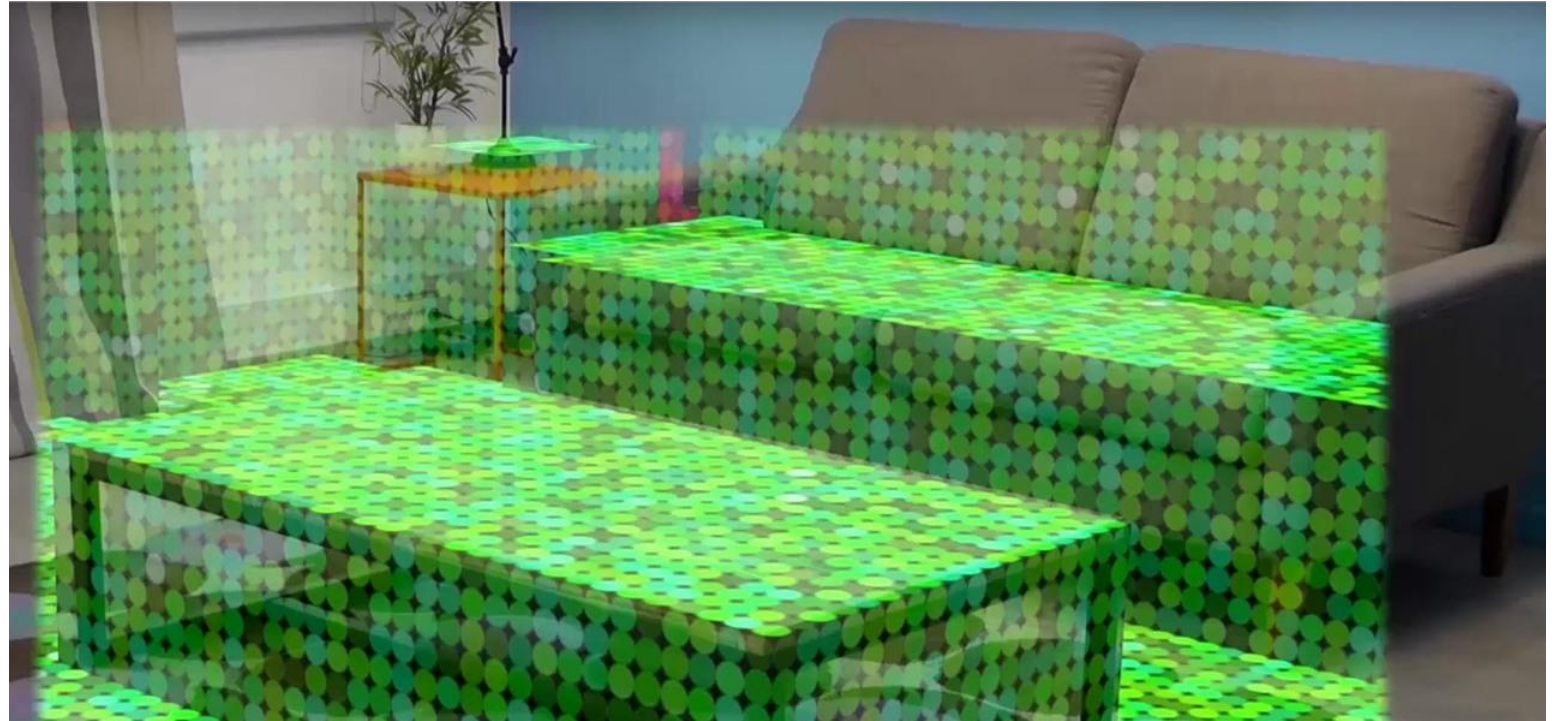
- Support for Windows 10 ( coming soon )
  - HoloLens
  - Microsoft Surface
  - HP Spectre
- Easily deploy apps across devices



# HoloLens Spatial Mapping

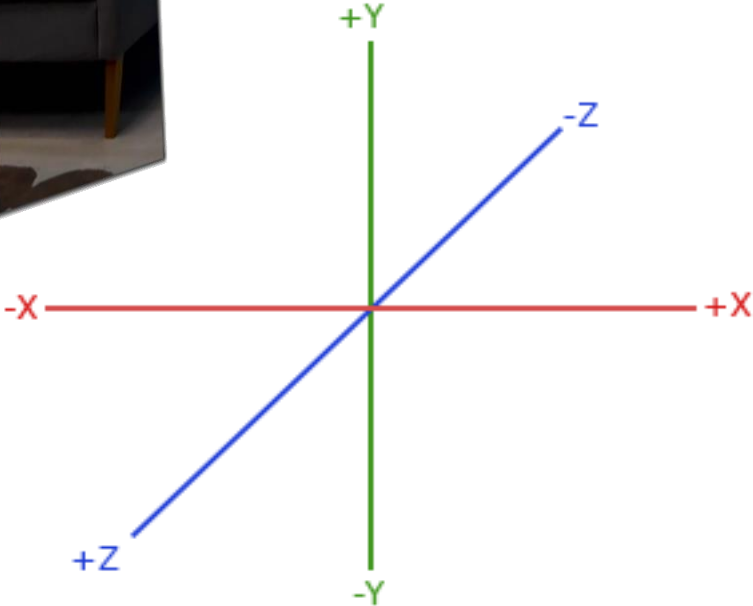
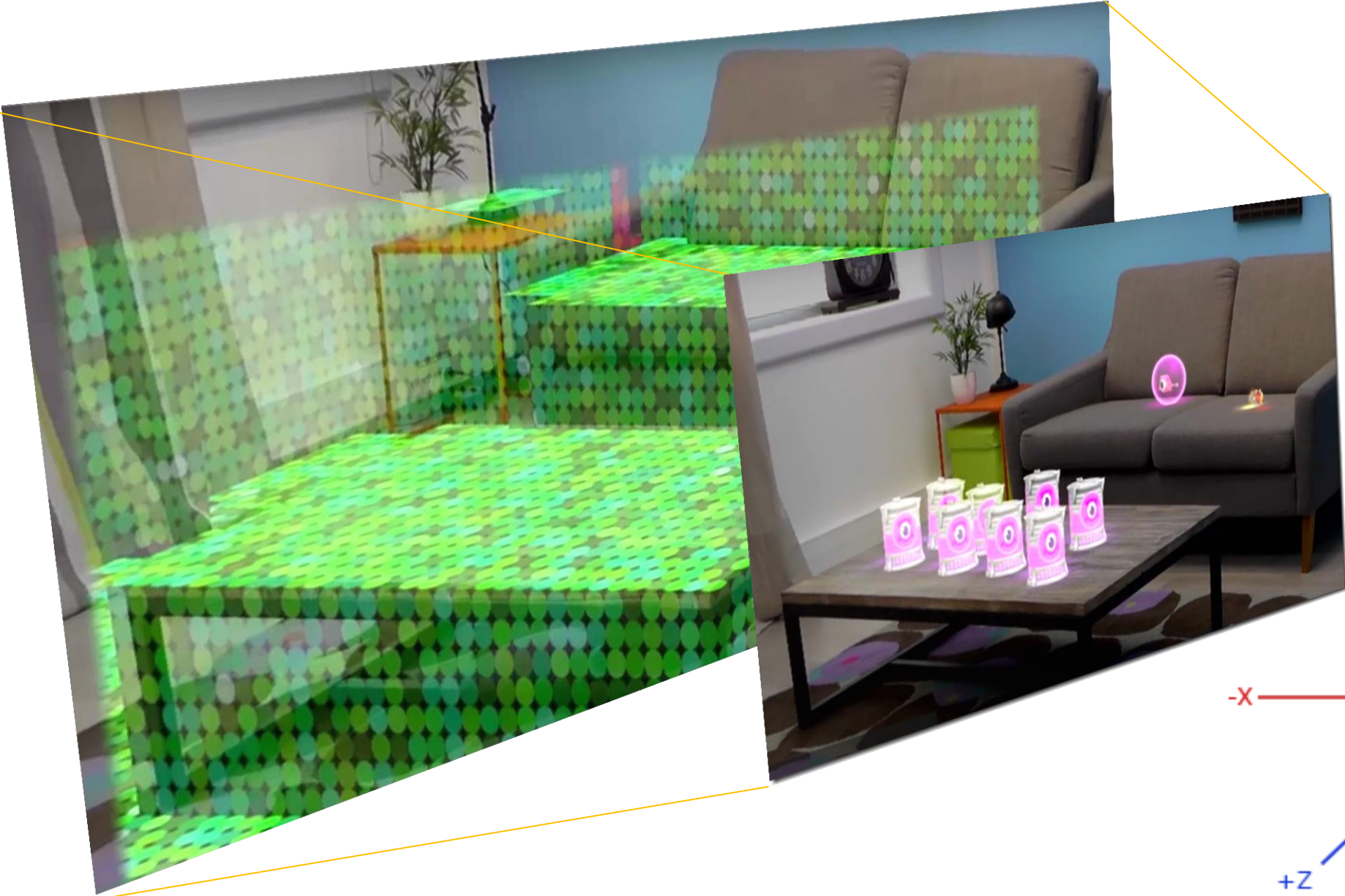
Creates 3D meshes of  
Spatial Surfaces

- Reconstructs Spatial Surfaces
- Maps to Spatial Coord System
- Localizes the user and surfaces





# 3D SPATIAL SURFACES IN THE REAL WORLD

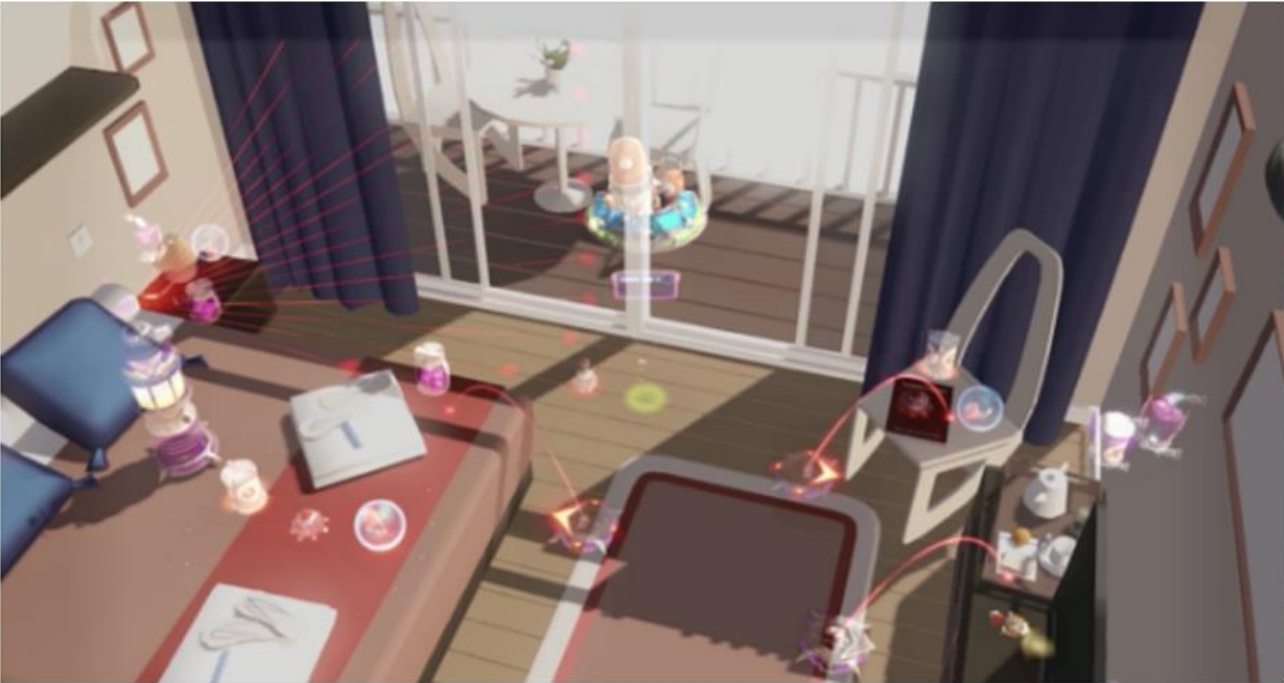


# COMMON USAGE SCENARIOS

Placement



Occlusion



Physics

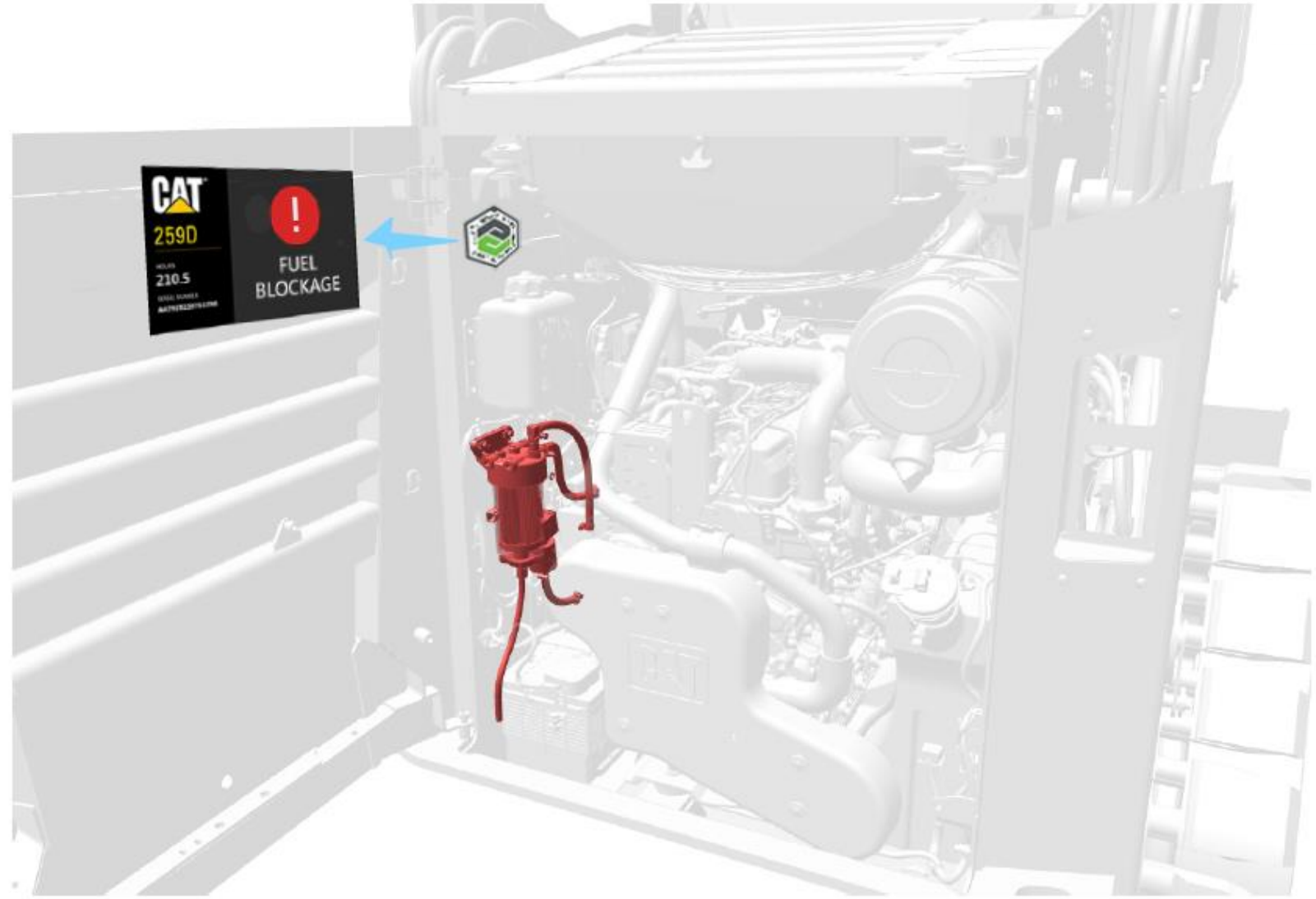


Navigation

# Vuforia for HoloLens

## Recognition and Pose Registration for HoloLens

- Recognize images and objects
- Know their precise location
- Accurately register content





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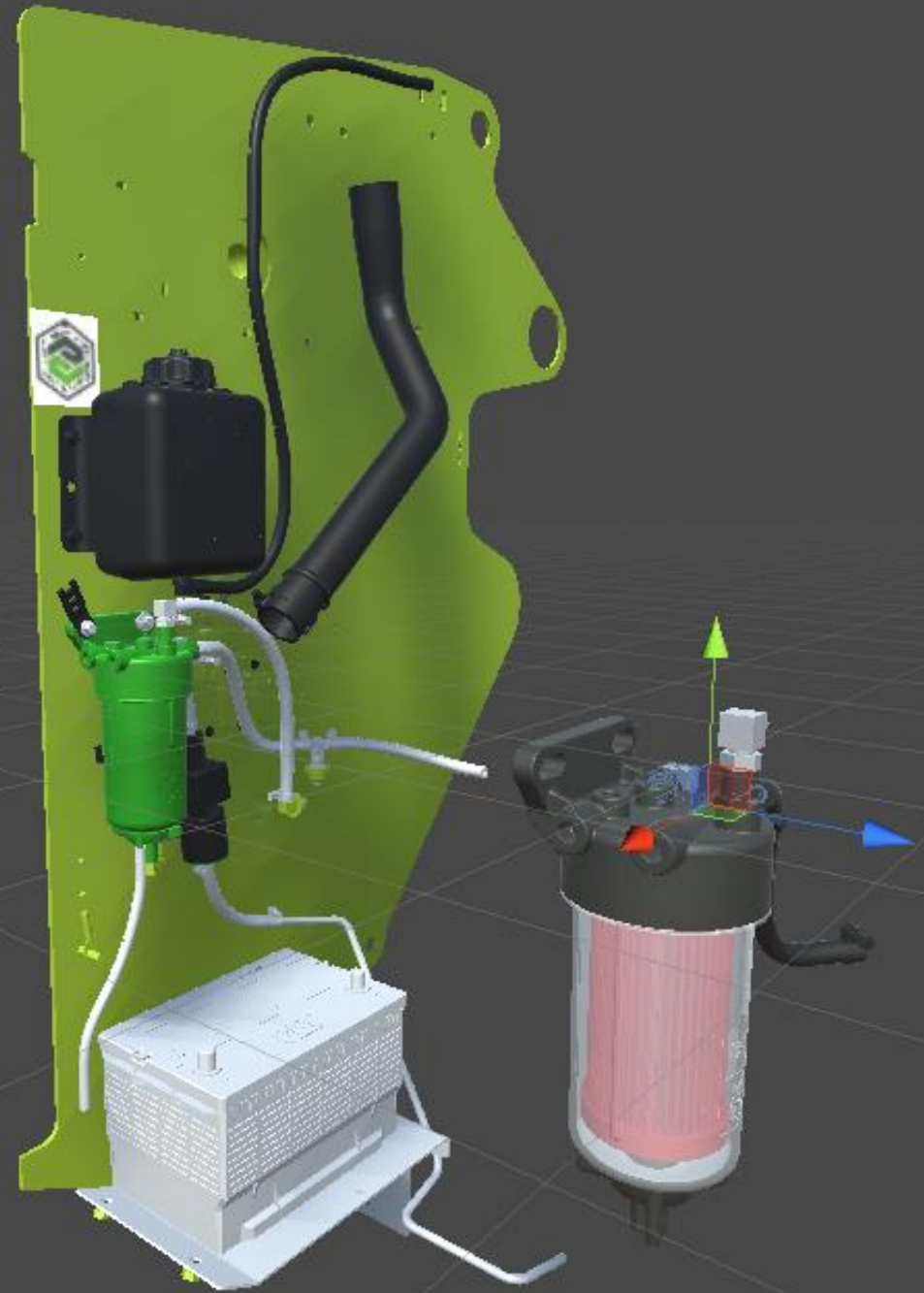
## **Vuforia enables HoloLens apps to recognize things and know where they are**

- Uniquely identify images and objects
- Know where they are in the environment
- Precisely register content

### **Supported by**

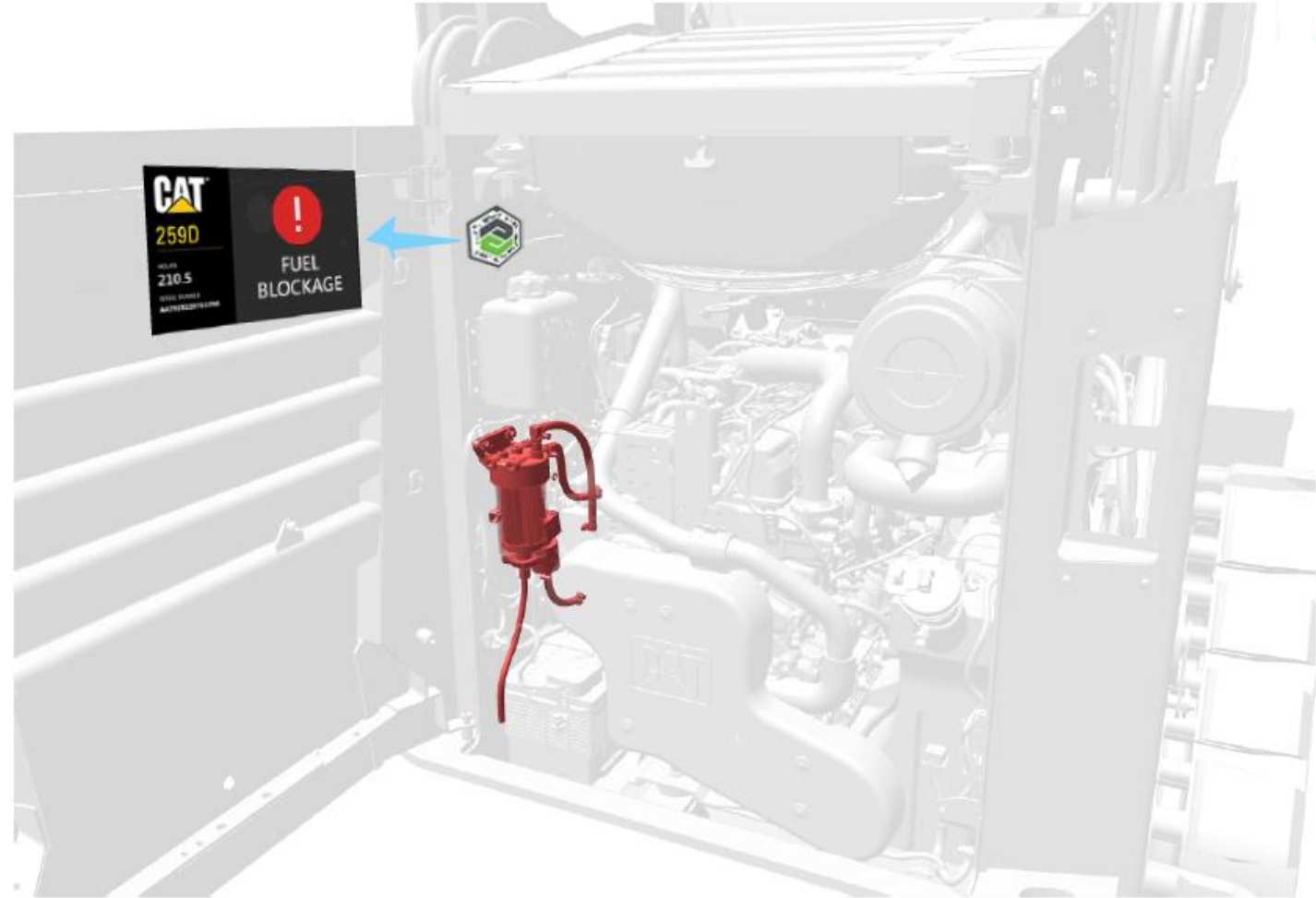
- Vuforia Extended Tracking
- C# API in Unity and Visual Studio
- On Windows 10 Devices

# BUILDING THE DEMO



# WORKFLOW OVERVIEW IN UNITY

1. Configure the scene for AR
2. Add targets and digital content
3. Position on CAD proxy model
4. Configure build package
5. Build for Windows Store



# Workflow in Unity

