



ARKit Capabilities

Apple Augmented Reality Framework

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Introduction

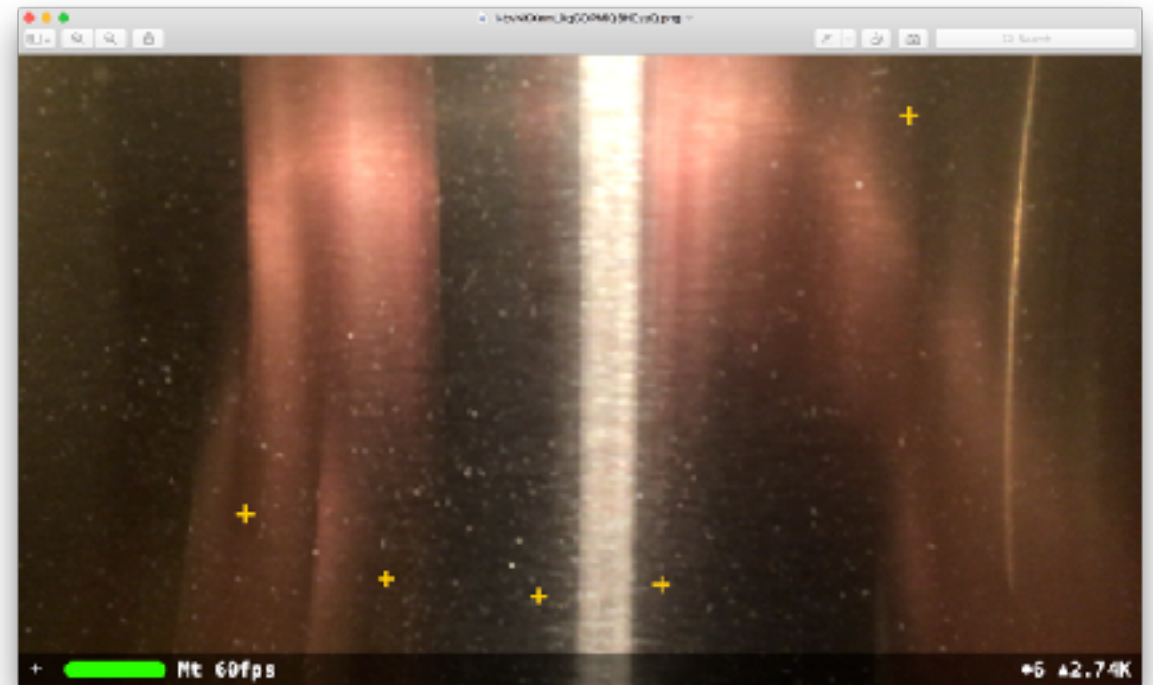
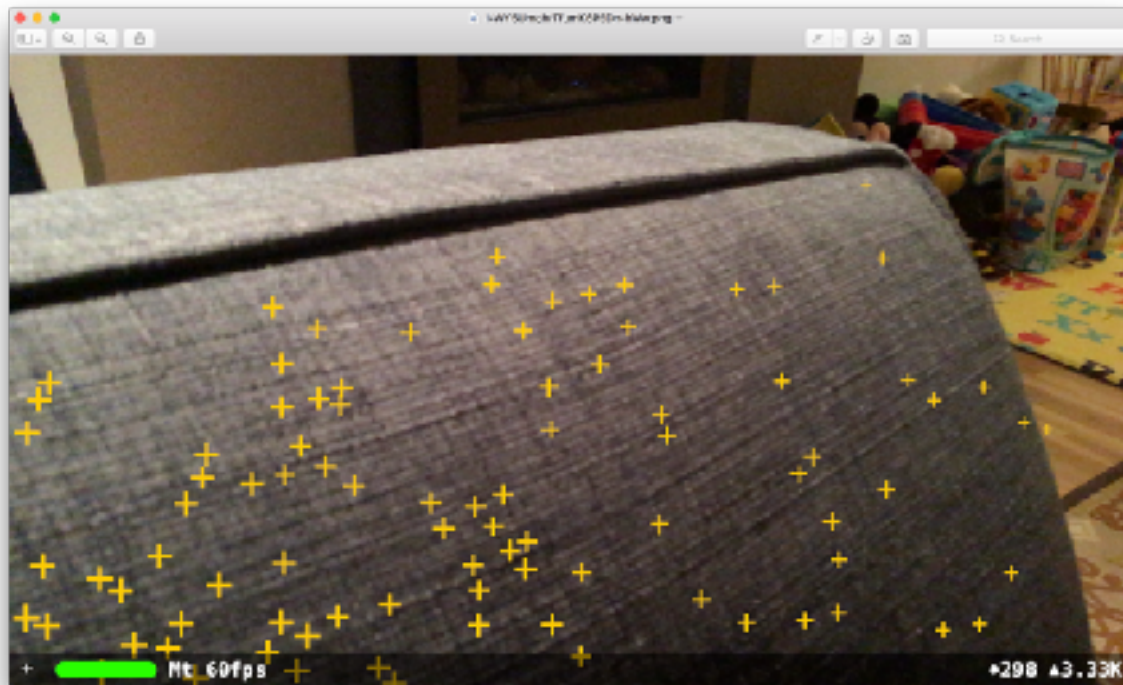
- Apple announced **ARKit** for **iOS 11**
 - Fast, stable motion tracking
 - Plane estimation
 - Ambient lighting estimation
 - Vision framework using Core ML
 - Unity, Unreal engine support



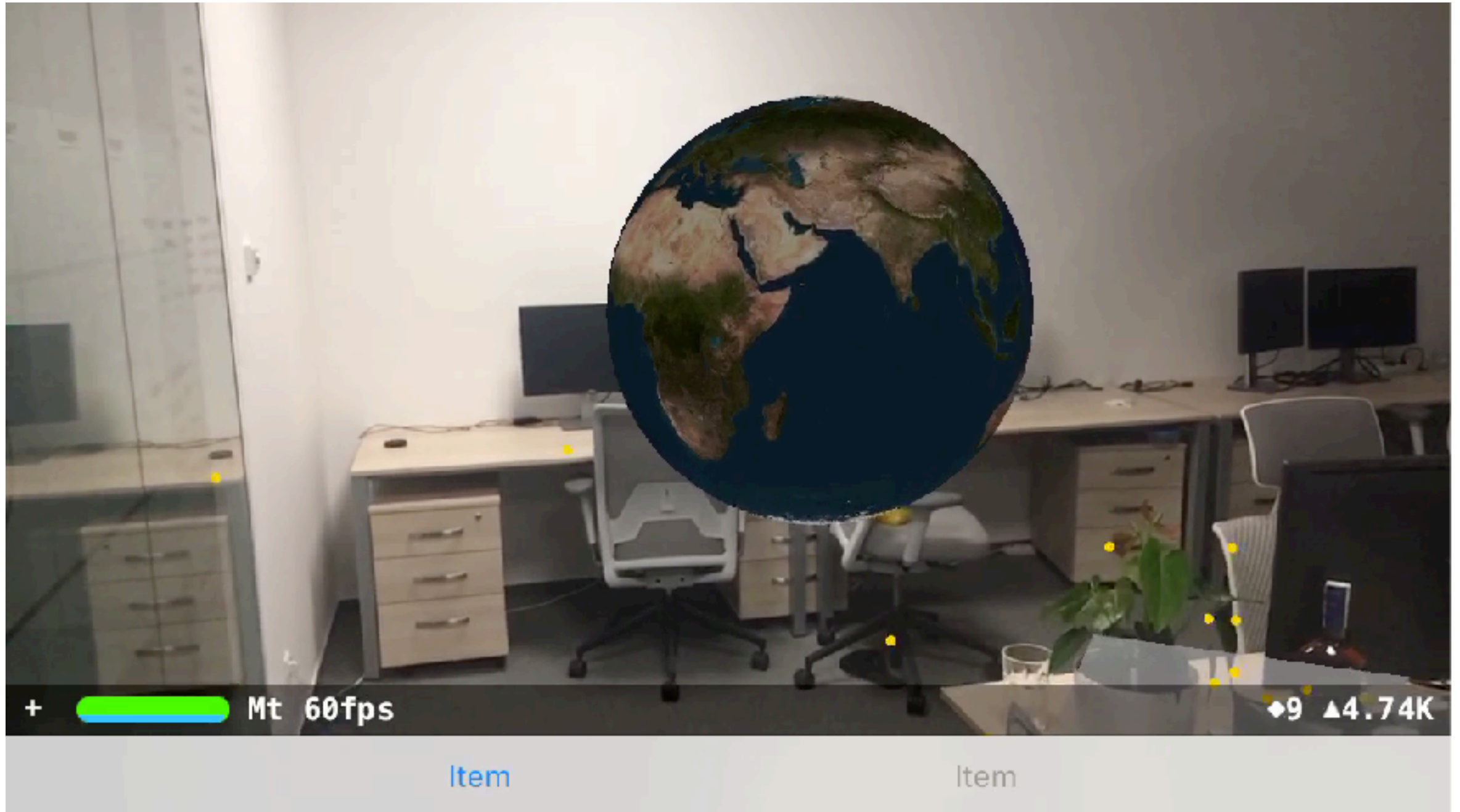
Try promised features...

Motion Tracking

- stable & realtime motion tracking (invariant feature points)
- ambient light intensity estimation (not direction)
- supported by CoreMotion (accelerometer, gyroscope...)

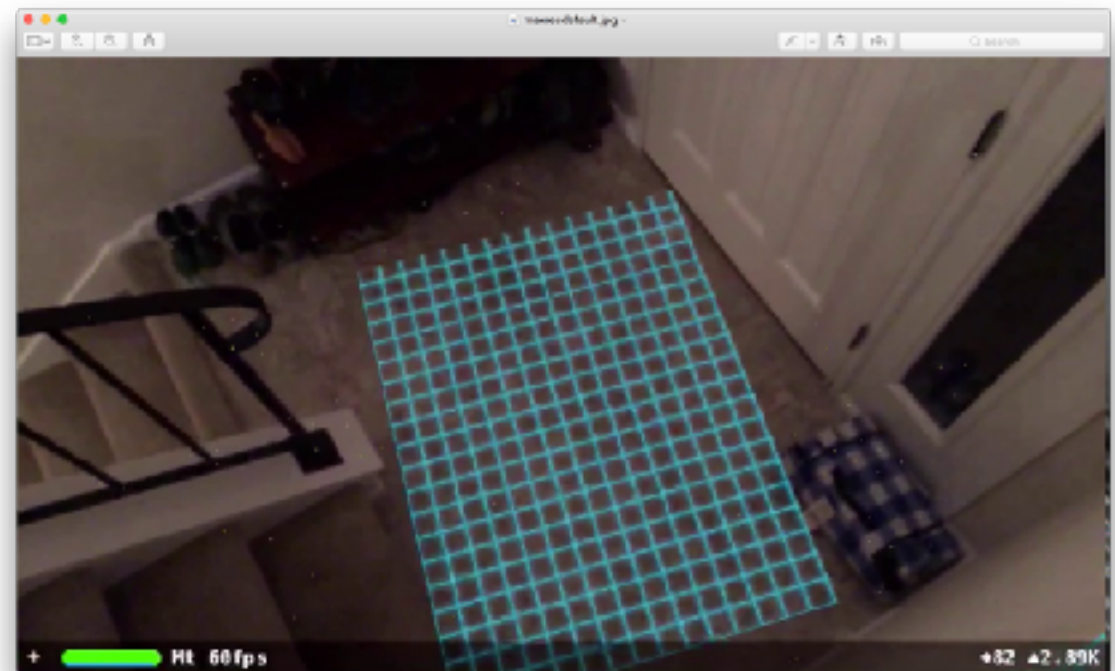
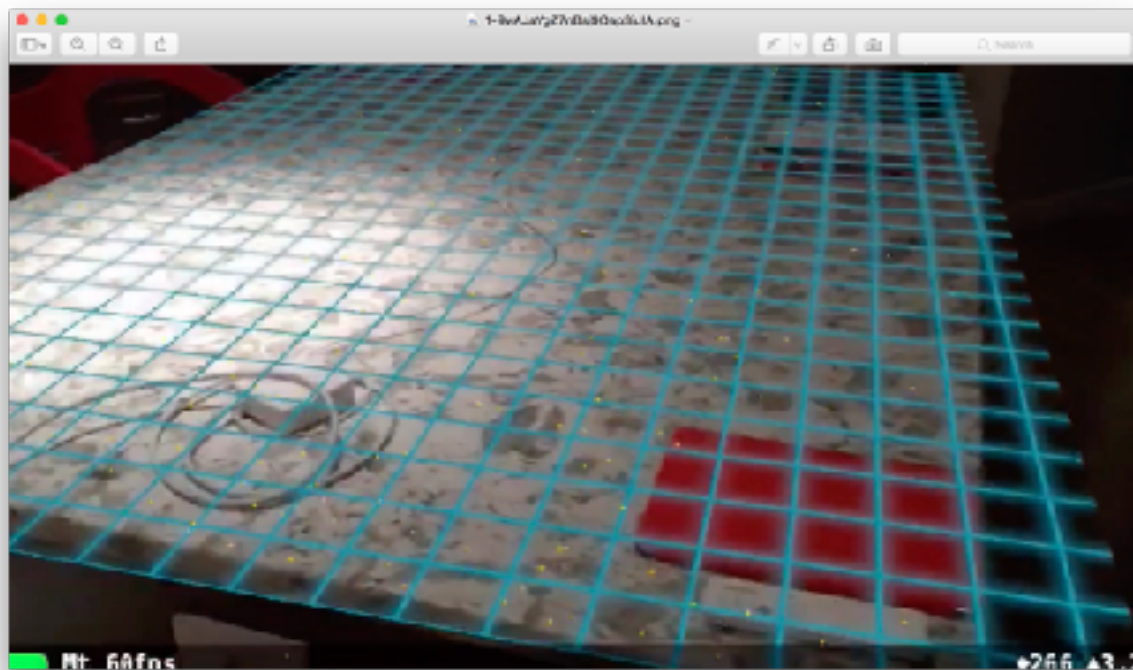


Motion Tracking



Plane estimation

- only horizontal plane detection (vertical probably coming soon)
- multiple plane detection different height
- after initialization stable in poor lighting



Plane Estimation

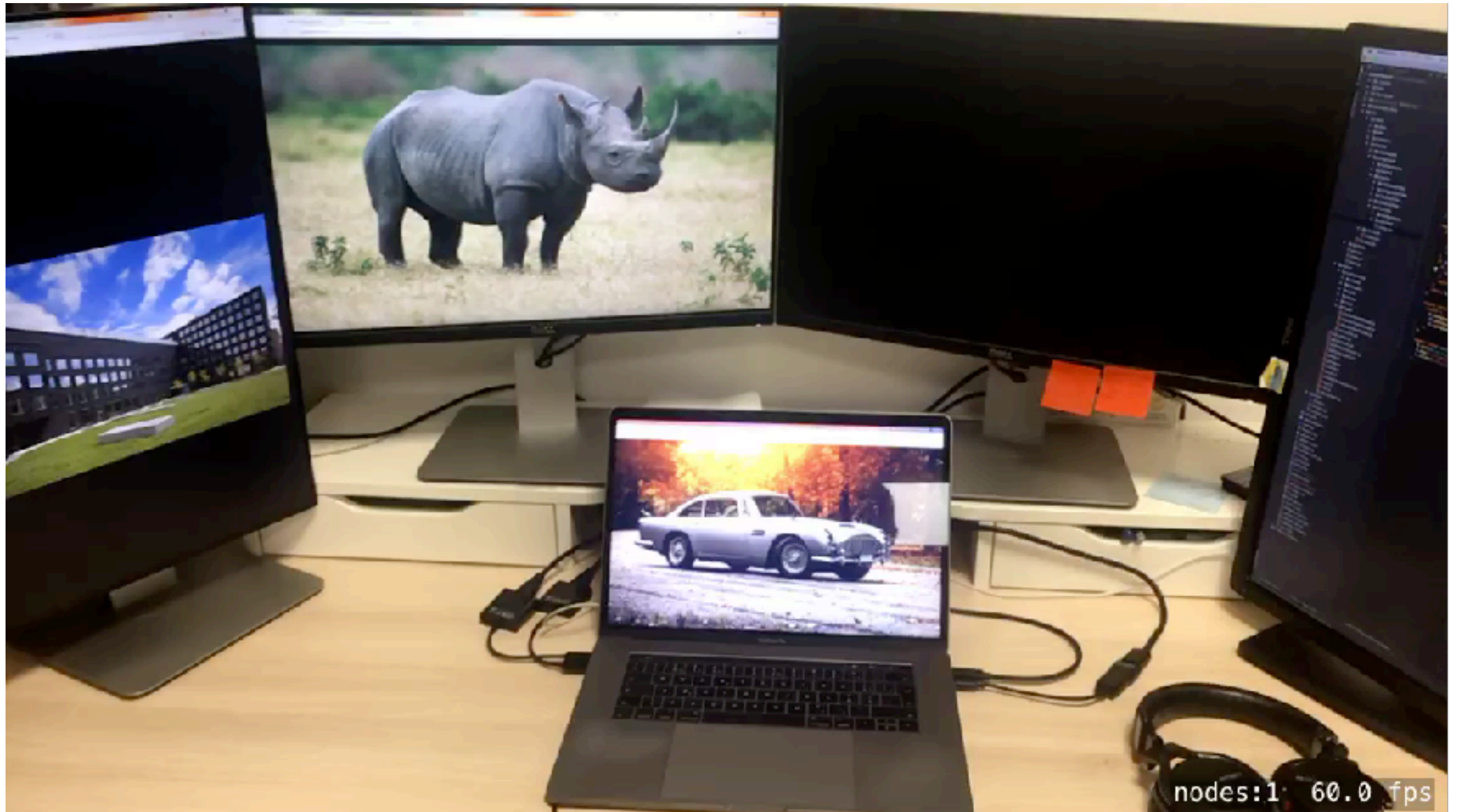


Vision Framework

- built on top of Core ML (Machine Learning)
 - high-performance image analysis
 - identify faces
 - detect features,
 - classify scenes
- trained machine learning models

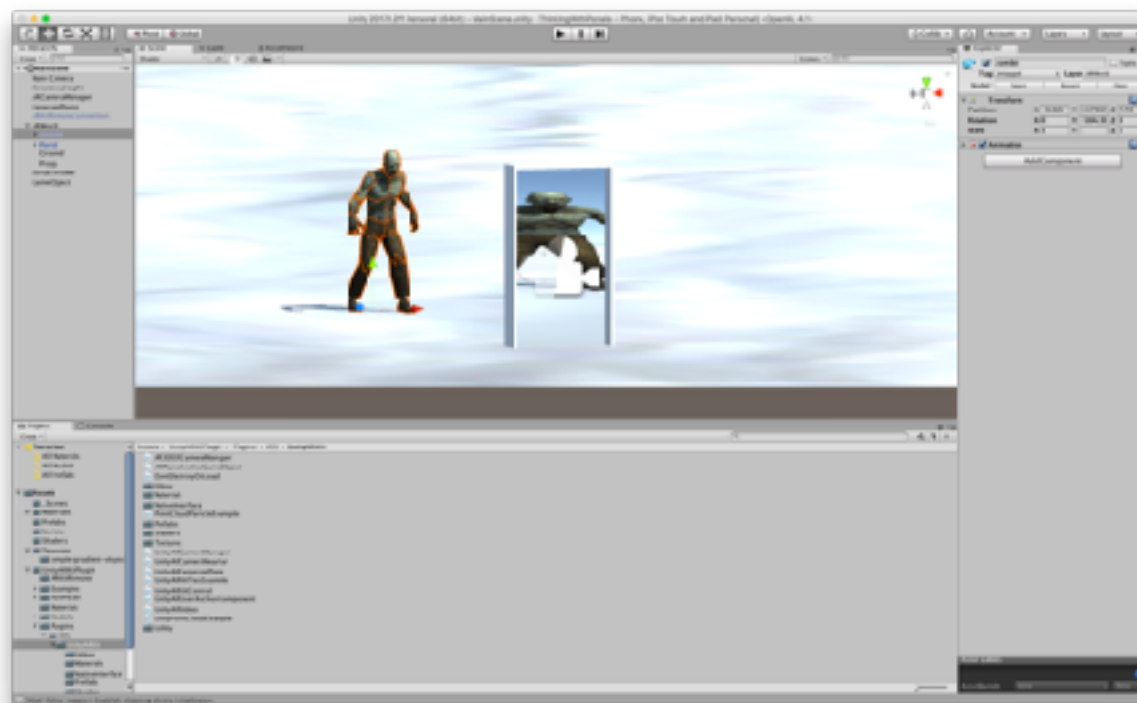


Vision Framework



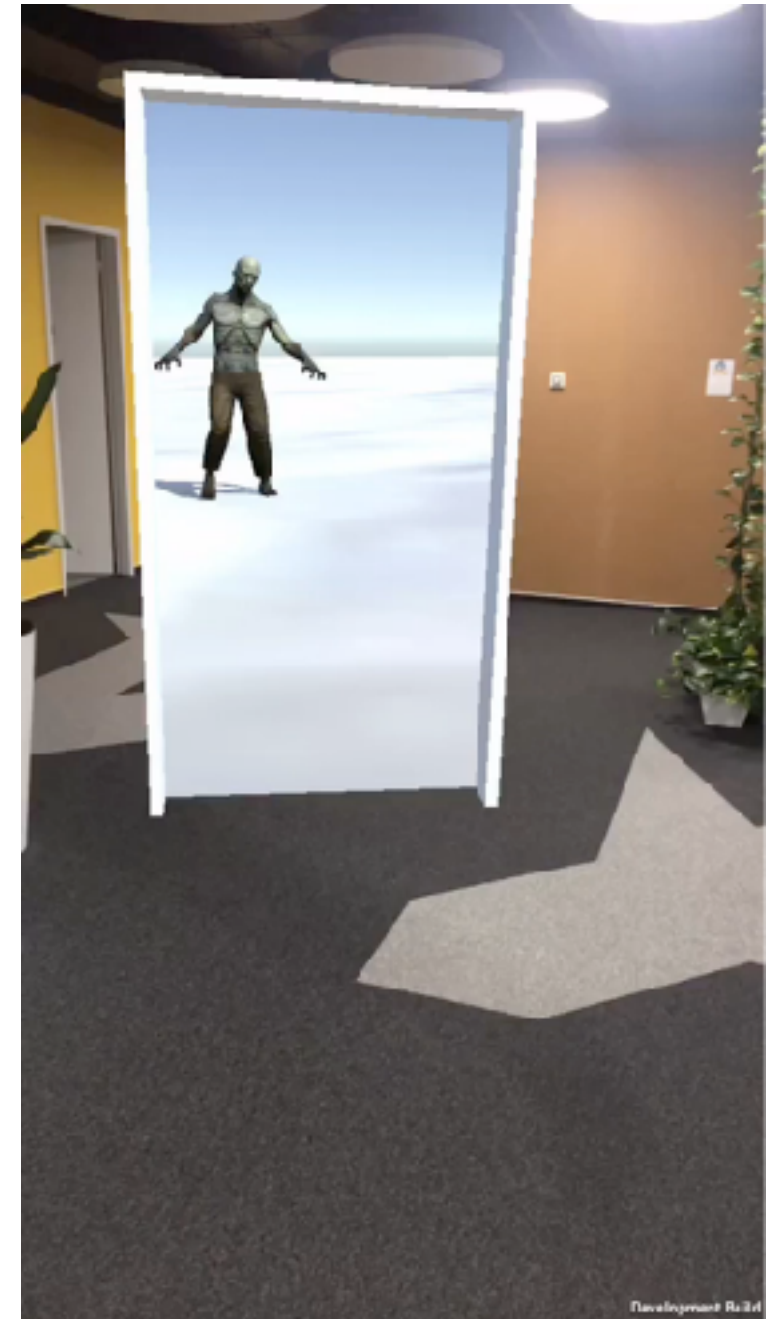
Unity support

- Official ARKit middleware support
- “Experimental native plugin that enables using all the functionality of the ARKit SDK “



Unity Portal

- Portal Application demo
- Unity scene uses
 - ARKit **Plane** detection





More coming soon...

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<https://github.com/michalsindelar/woARld/>