Presentation
Conversation
AR Examples
education called key to keeping women out of jail
Augmented Reality
Virtual Reality
Mixed Reality
I'm an "influencer"
John Westra #VR #XR #AR #Innovation
@John_Westra
#VIO™ Virtual Innovation Officer @VUTURUS
VR #AR #DigitalSignage Together We Can Do More! How Can I Help You Succeed?
Location: Colorado / Michigan - USA  vuturus.com
Joined: May 2008
2,297 Following  2,648 Followers

Cathy Hackl #AR #VR #MR #XR
@CathyHackl  Follows you
Oscar Falmer follows
Futurist @youarehereco. #AR #VR #XR Speaker, Author & Influencer. #MR Ventures. @Oculus Launchpad. Former @htcvive VR evangelist, @lighthouseVR @CNN @Discovery.
Location: Atlanta, GA  linkedin.com/in/cathyhackl
Joined: July 2012
Microsoft HoloLens
$3,000+

Google Glass
$1,800+

Magic Leap One
$2,300+
ARKit
iOS 11
- horizontal planes
- light estimation
- face tracking

ARKit 1.5
iOS 11.3
- vertical planes
- image recognition
- better performance

ARKit 2
iOS 12
- world map sharing
- object detection
- image tracking

June 2017
January 2018
June 2018
iPhone X
iPhone 8
iPhone 8 Plus
iPhone 7
iPhone 7 Plus
iPhone 6s
iPhone 6s Plus
iPhone SE

iPad Pro (all models)
iPad (5th generation)
ARWorldTrackingConfiguration
ARImageTrackingConfiguration
ARFaceTrackingConfiguration
AROrientationTrackingConfiguration
ARObjectScanningConfiguration
Soda Can Demo
Soda Can Demo Summary

Xcode AR Starter Project
3D Model from Google Poly
Convert object to .scn file for easy editing
World tracking and horizontal plane detection
Hit test to find location in world space
Apple’s Sample Project

- Multiple objects
- Direct manipulation
- Placement indicator
- Error handling
Student ID Demo
Student ID Demo Summary

Xcode AR Starter Project
AR Resource Bundle
Image Tracking Configuration
SCNText to create 3D text
8 people
2 co-owners
3 iOS devs
12+ apps
service company

1000+ people
Owned by Expedia
20+ iOS devs
2 apps
product company
“iOS Design Technologist”

UX Engineer

Design Engineer

Design Developer
UX Engineer
all front end
prototyping
design dept

Software Engineer
front, mid, back
production
engineering dept
iOS Engineer Skills

UIKit and other Apple frameworks
Swift (Objective-C still used)
Ecosystem knowledge (App Store rules, HIG)

Memory, OS, networking
Unix / scripting
UX and design
What I look for in iOS candidates

Do you know Swift?

**Difference between class and struct?**

Do you know UIKit?

**How would you build this screen? UITableView vs UICollectionView?**

Have you actually built an app before?

**If done with a team, what was your contribution?**
What I look for in iOS engineers (cont.)

Is your code clean?
**Concise, clear, readable, Swift**

Do you have high attention to detail?
**Code quality, their apps, coding exercise**

Do you use iOS/Swift terminology?
**What’s the name of the UI element asking for camera permissions?**
Classes to take

HCI
Tech Writing
Mobile App Development

Algorithms
Computer Graphics / Computer Vision
AI/ML because it’s 🔥
Action plan towards iOS dev

1. Build an app
2. With some friends
3. Publish it on the App Store
4. Ship at least one update
goo.gl/zKkcsb