

Using Augmented Reality with JavaScript

TJ VanToll (@tjvantoll)



NHL playoffs: Blackhawks defeat Red Wings 2-1 in Game 7 overtime thriller



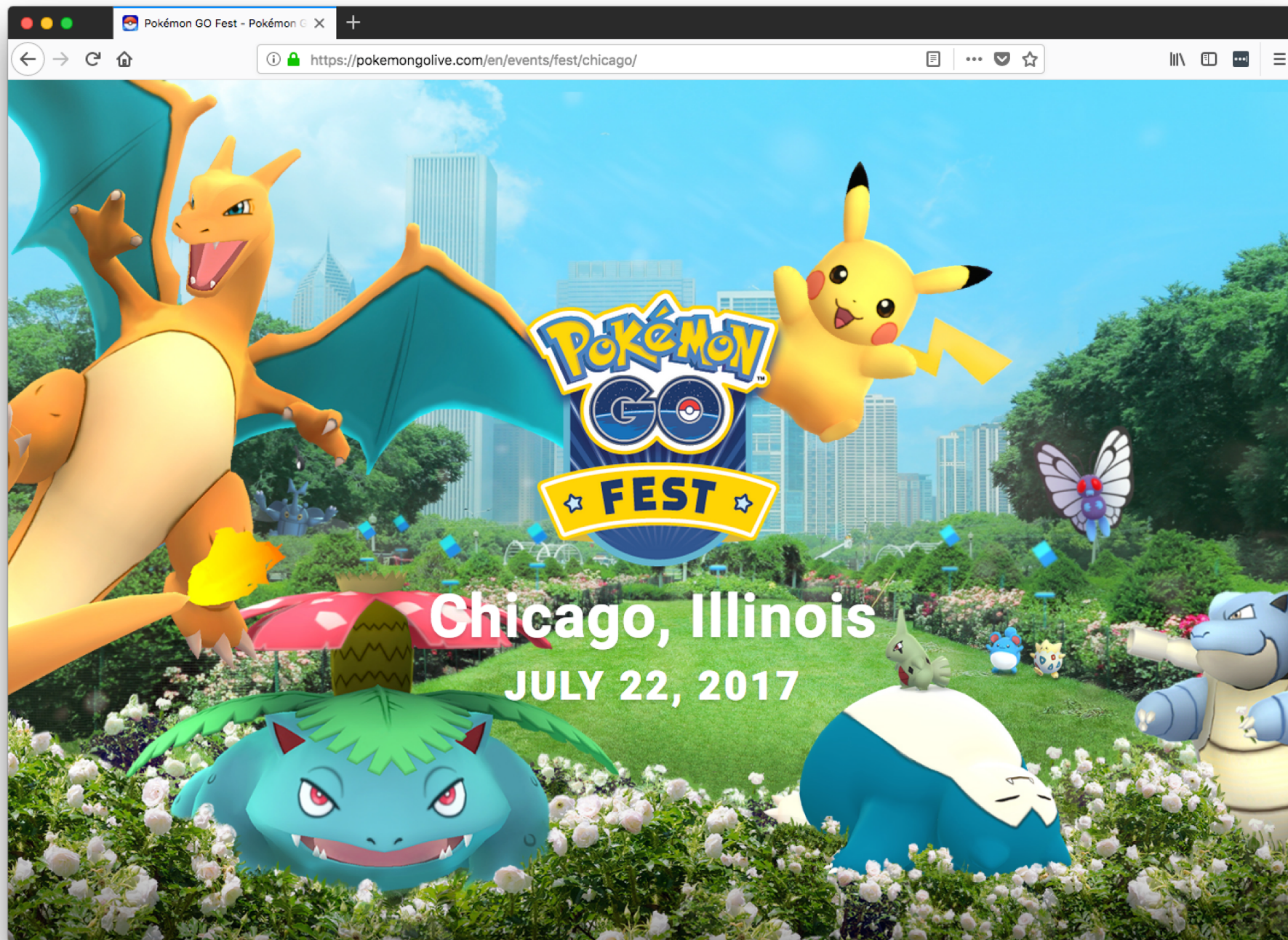
By **AMUIR29** May 30, 2013





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Federal Tax Savings^[1]





I WENT TO POKÉMON GO FEST, AND IT WAS A DISASTER

The inaugural festival turned into a costly mess for Niantic

By [Megan Farokhmanesh](#) | [@Megan_Nicolett](#) | Jul 25, 2017, 11:37am EDT

Photography by [Dani Deahl](#)

8:38



TJVanToll
& Bagon



LEVEL 40



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TJ VanToll

Principal Developer Advocate

@tjvantoll



Agenda

- Brief history of AR
- AR today
- Building AR apps w/JS

Augmented Reality (AR) is the integration of digital information with the user's environment in real time.

Pokémon Go Brings Augmented Reality to a Mass Audience

← → ↺ 🏠

🔒 https://www.nytimes.com/2016/07/12/technology/pokemon-go-brings-augmented-reality-to-a-mass-aud

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TECHNOLOGY | Pokémon Go Brings Augmented Reality to a Mass Audience

👤 🐦 ✉️ ↻ 📌 228

Pokémon Go Brings Augmented Reality to a Mass Audience


By NICK WINGFIELD and MIKE ISAAC JULY 11, 2016

👤 🐦 ✉️ ↻ 📌 228




A man and a woman are standing on a city sidewalk, looking at a smartphone together. The man is wearing a dark t-shirt and a backpack, and the woman is wearing a light blue shirt and a yellow bag. They are in front of a blue wall with graffiti and a black building with the address '969 MARK' visible.


RELATED COVERAGE




How to Protect Privacy While Using Pokémon Go and Other Apps JULY 12, 2016




Pokémon Go Players Take Their Hunt to the Streets of New York JULY 11, 2016



WELL
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Want to Capture a Pokémon? Look Behind That Tree JUNE 8, 2016



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Ingress Has the World as Its Game Board JUNE 8, 2016

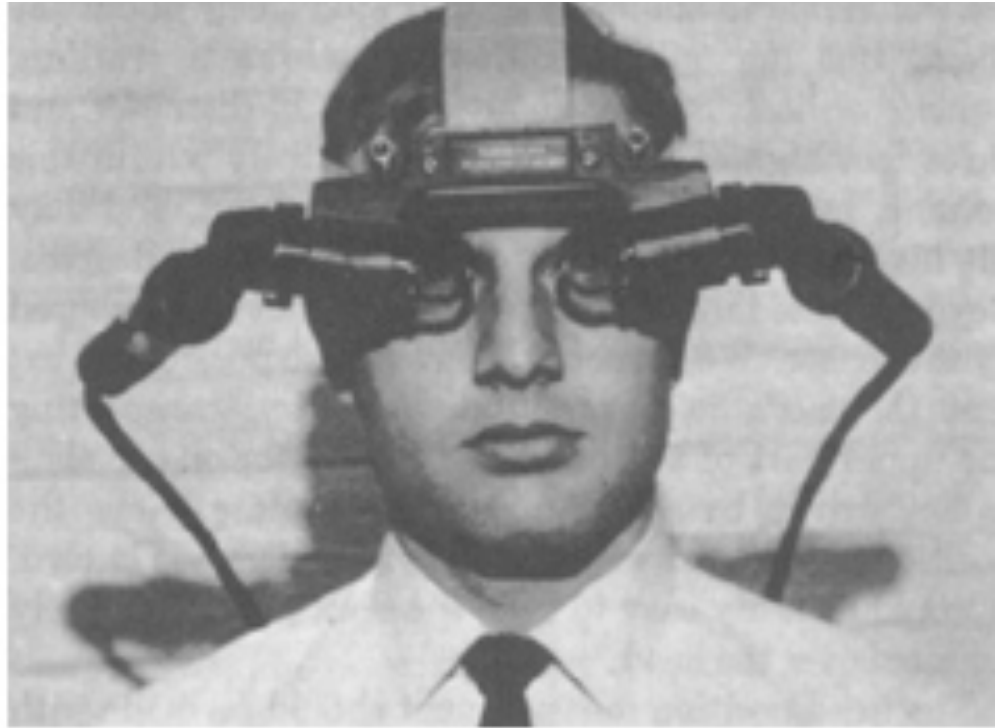
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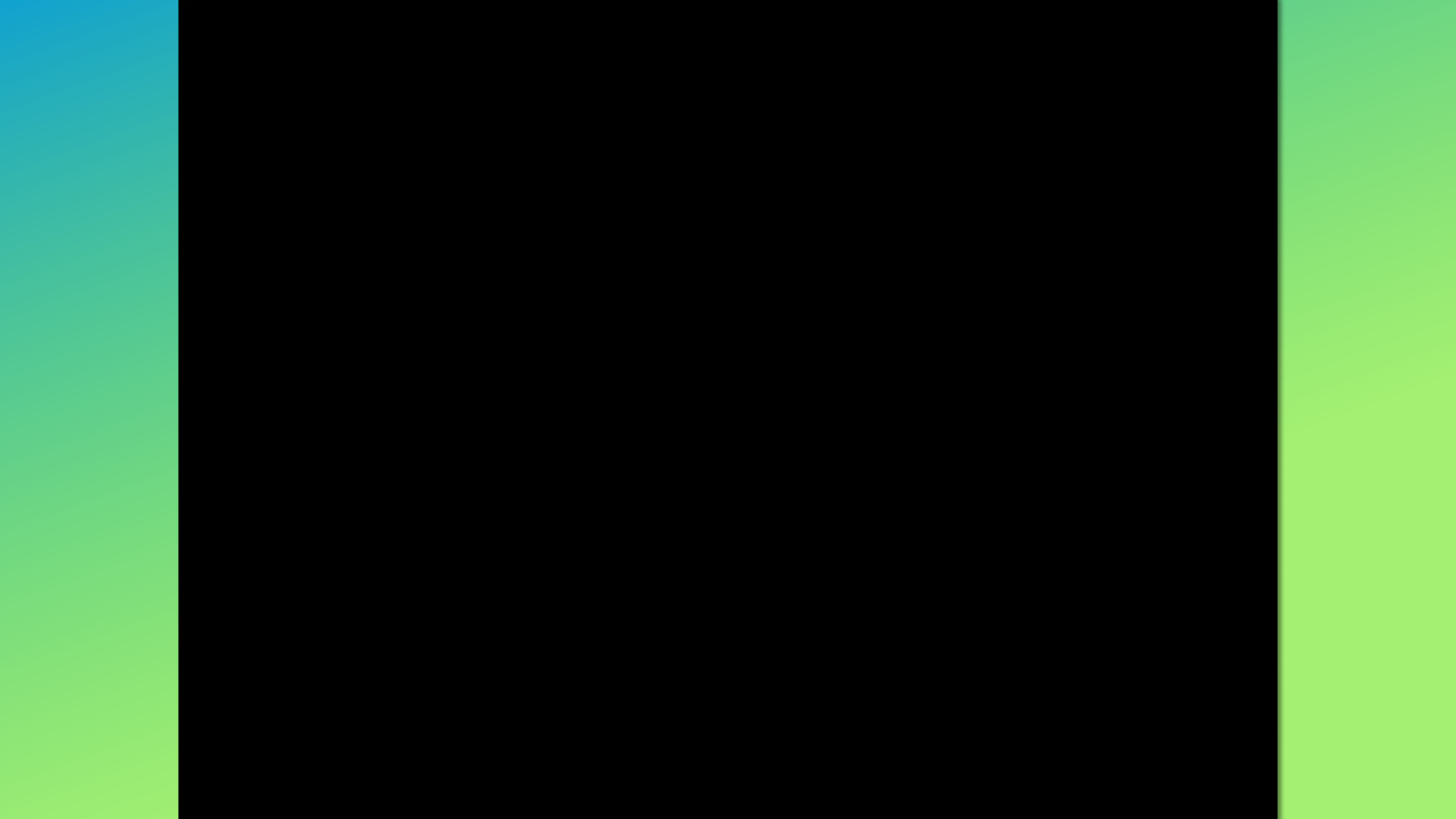
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Source: <https://www.wareable.com/ar/everything-you-need-to-know-about-augmented-reality>



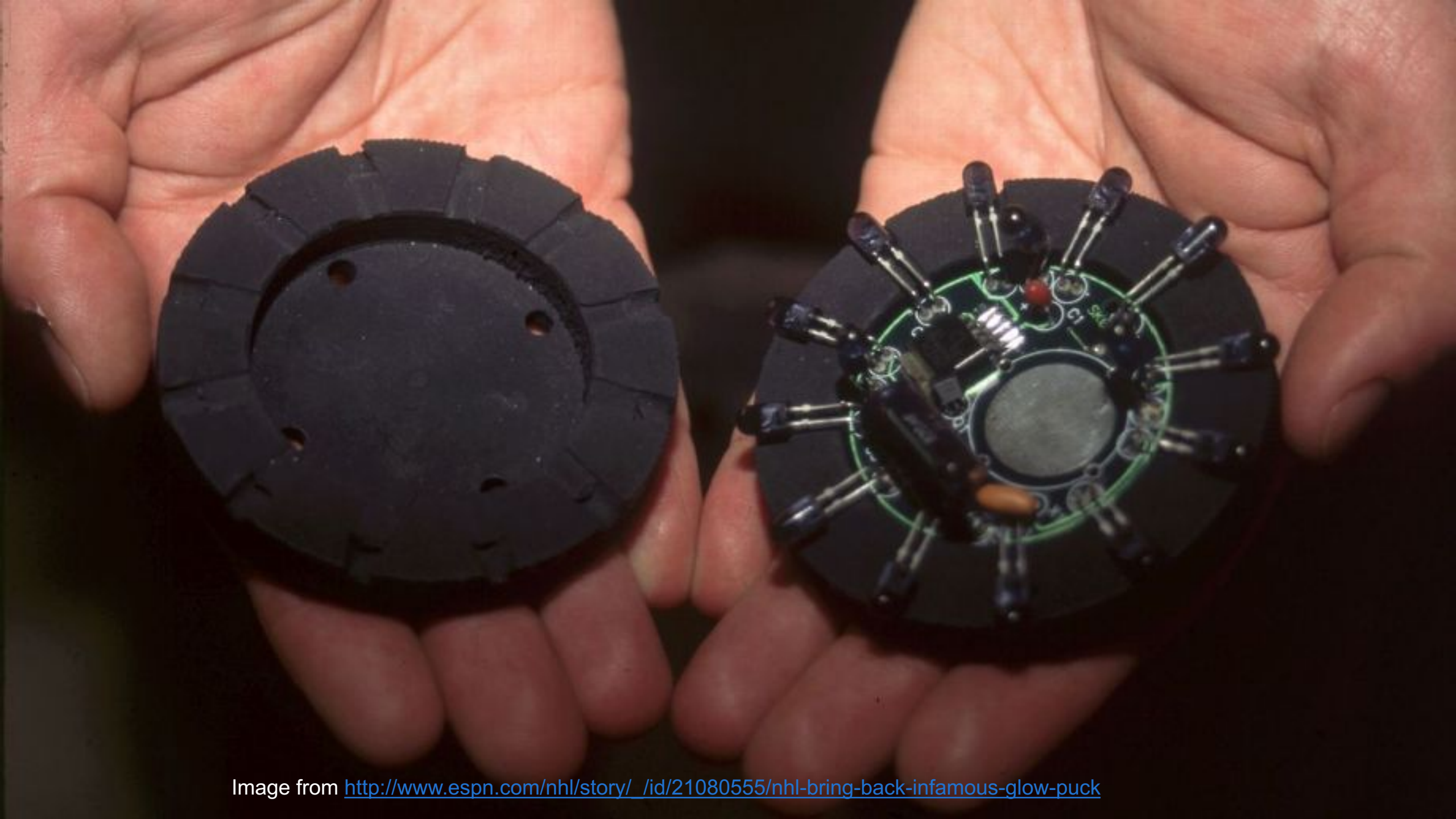
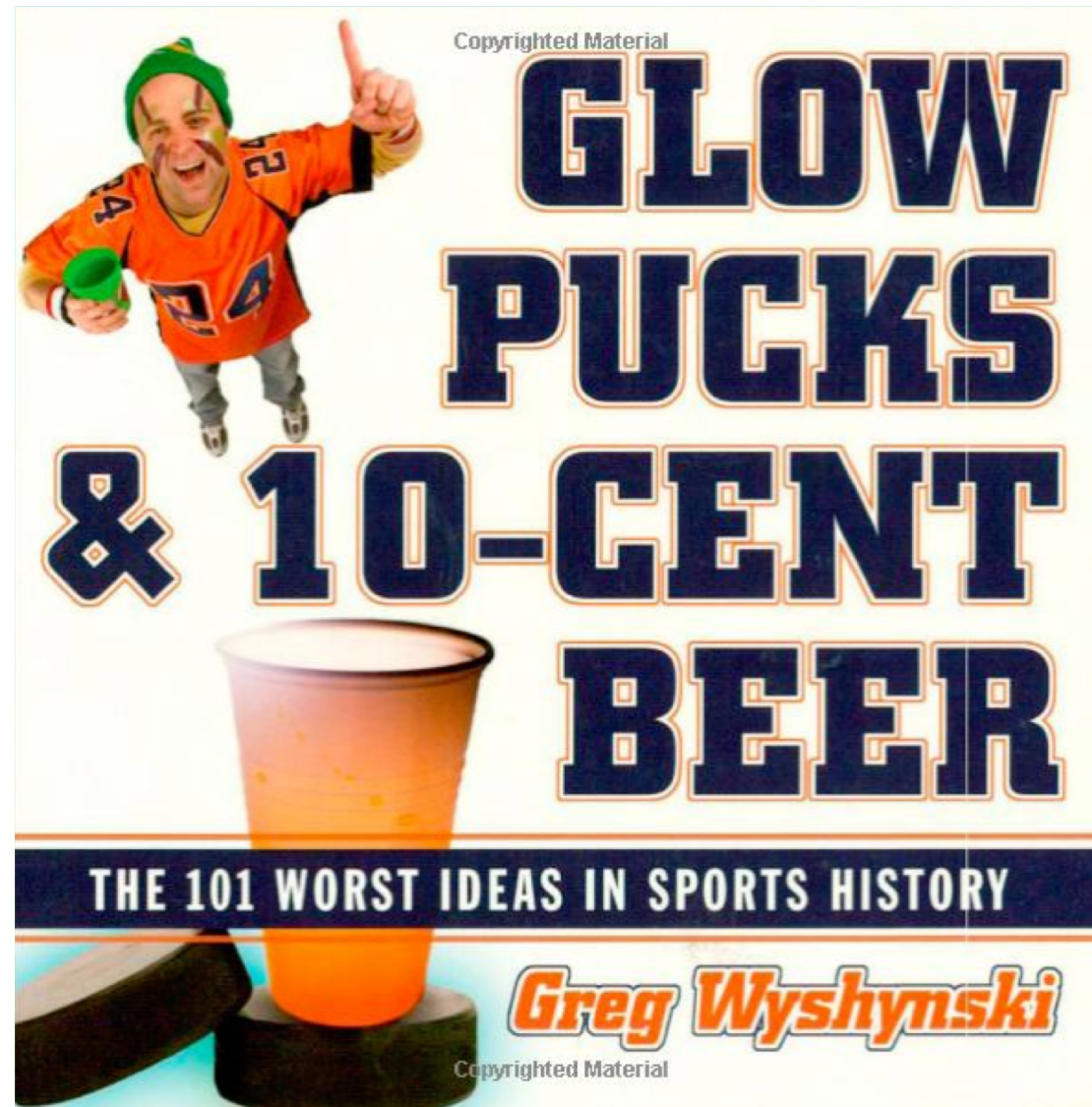


Image from http://www.espn.com/nhl/story/_/id/21080555/nhl-bring-back-infamous-glow-puck

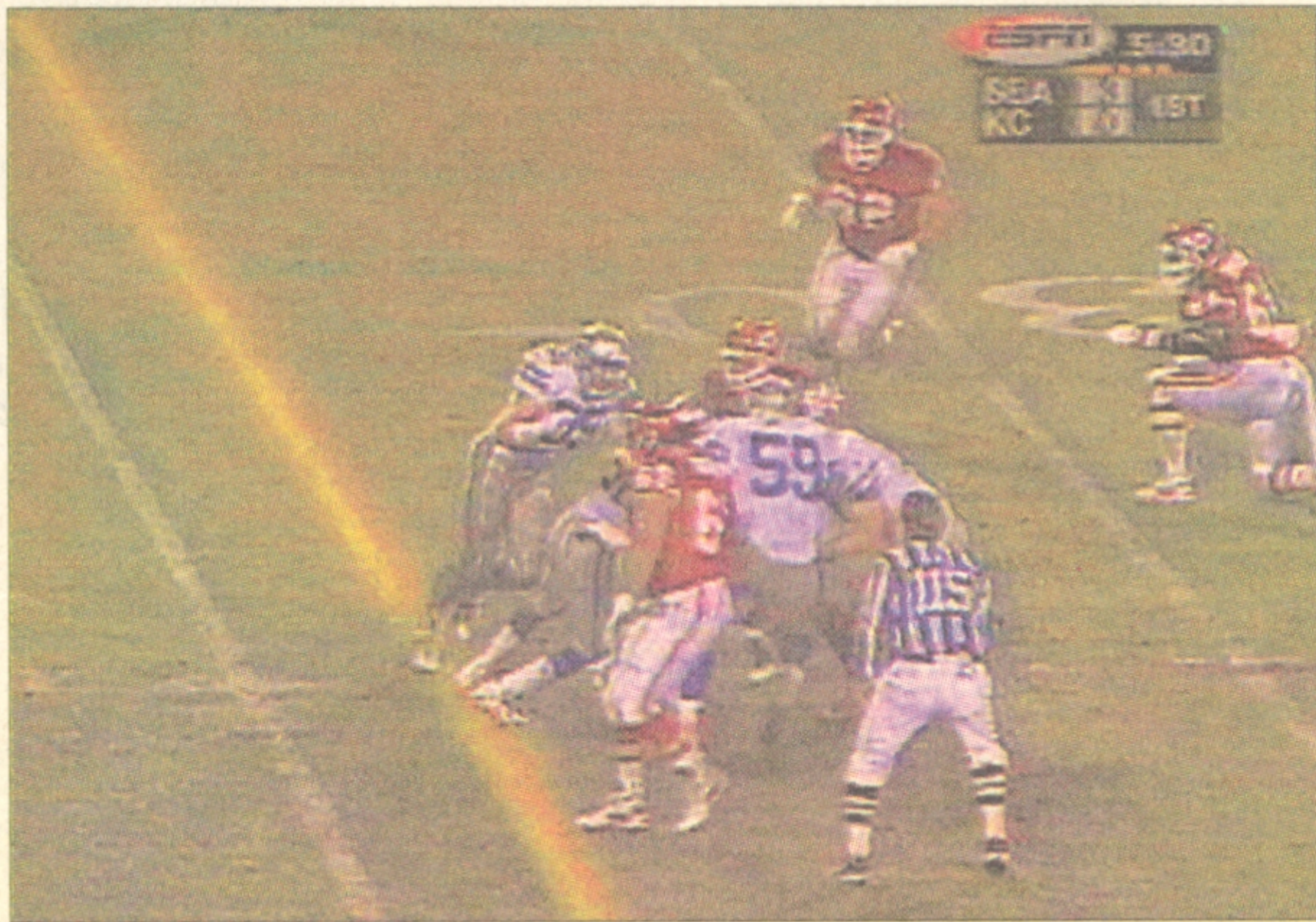


Available on Amazon at <https://www.amazon.com/Glow-Pucks-10-Cent-Beer-History/dp/1589793080>

The thin yellow line

ESPN added a new feature in its football broadcasts this year. "1st and Ten" technology places a yellow line, visible only to TV viewers, that indicates where the first-down marker is.

Story, D-4



ESPN

0 9:28 1ST 3
1ST & 10



1ST & 10



Image from <https://gobraithwaite.com/creative-marketing-saved-nfls-yellow-first-line/>

“It probably cost the broadcaster \$25,000-\$30,000 for a weekend back then.

We had to roll out an entire truck to make it work for games in the early days. It was five racks of equipment, a lot of engineers, a traveling circus.”

“Now it's basically one computer”



Source: <https://technabob.com/blog/2008/12/17/mini-augmented-reality-ads-hit-newstands/>







Source: <http://mashable.com/2012/04/04/google-glasses-project-glass/>

google glass

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Interest over time

?



Google Glass users fight privacy

www.cnn.com/2013/12/10/tech/mobile/negative-google-glass-reactions/index.html

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Google Glass users fight privacy fears

By Heather Kelly, CNN
Updated 2:48 PM ET, Thu December 12, 2013



Anti-Google Glass icons from StopTheCyborgs.org, a group raising awareness about Google Glass privacy concerns.

Story highlights

Google Glass users have faced some negative reactions from businesses and strangers

Carolyn Capern and her business partner Greg Trujillo were eating breakfast in a Panera bakery in Florida recently, each wearing Google Glasses but actually

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Google Glass available to everyone for \$1500

SARAH MISHKIN

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MAY 13, 2014

 21

Google's flagship wearable device—Google Glass—is [now available](#) for anyone in the US who wants to spend \$1,500 on the smart spectacles some find fascinating and others find bizarre.

In a post to the Google+ social network Tuesday afternoon, Google announced the new availability of the devices, which combine a set of spectacles with a small computer that sits just above the wearer's right eye.







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We're adding another dimension to computing. Where digital respects the physical. And they work together to make life better. Magic Leap One is built for creators who want to change how we experience the world.



Agenda

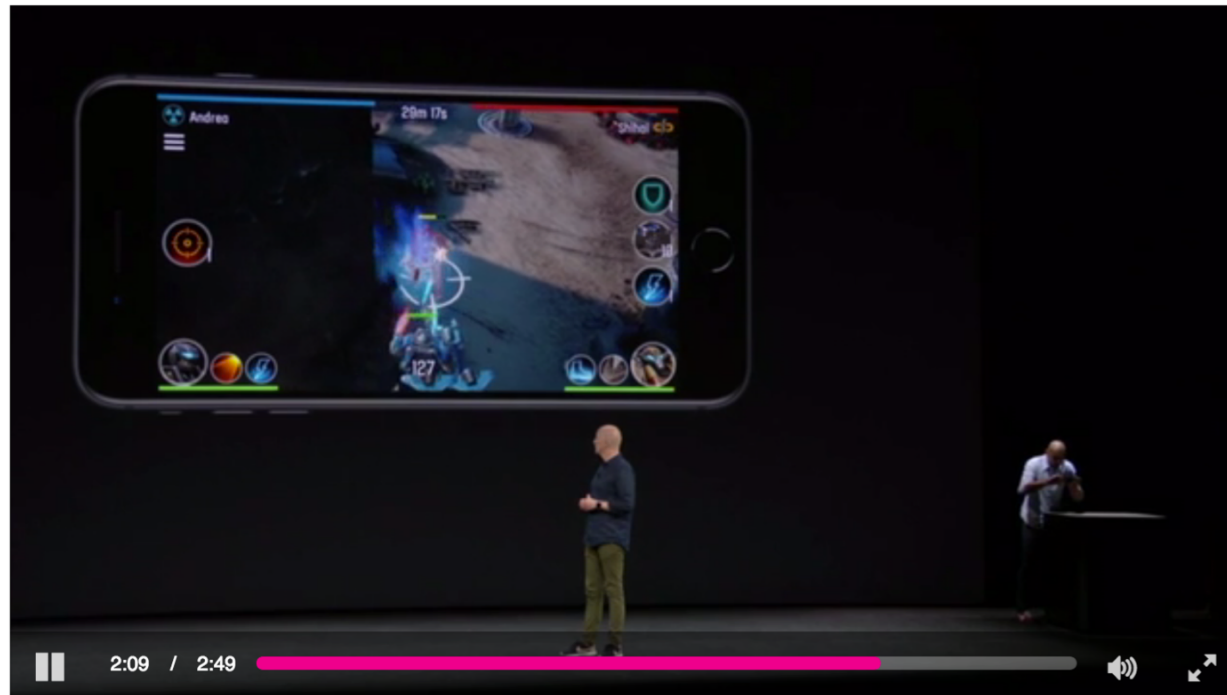
- ~~Brief history of AR~~
- AR today
- Building AR apps w/JS

Apple shows off breathtaking new augmented reality demos on iPhone 8

40

By Nick Statt | @nickstatt | Sep 12, 2017, 2:36pm EDT

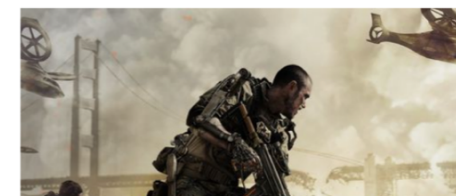
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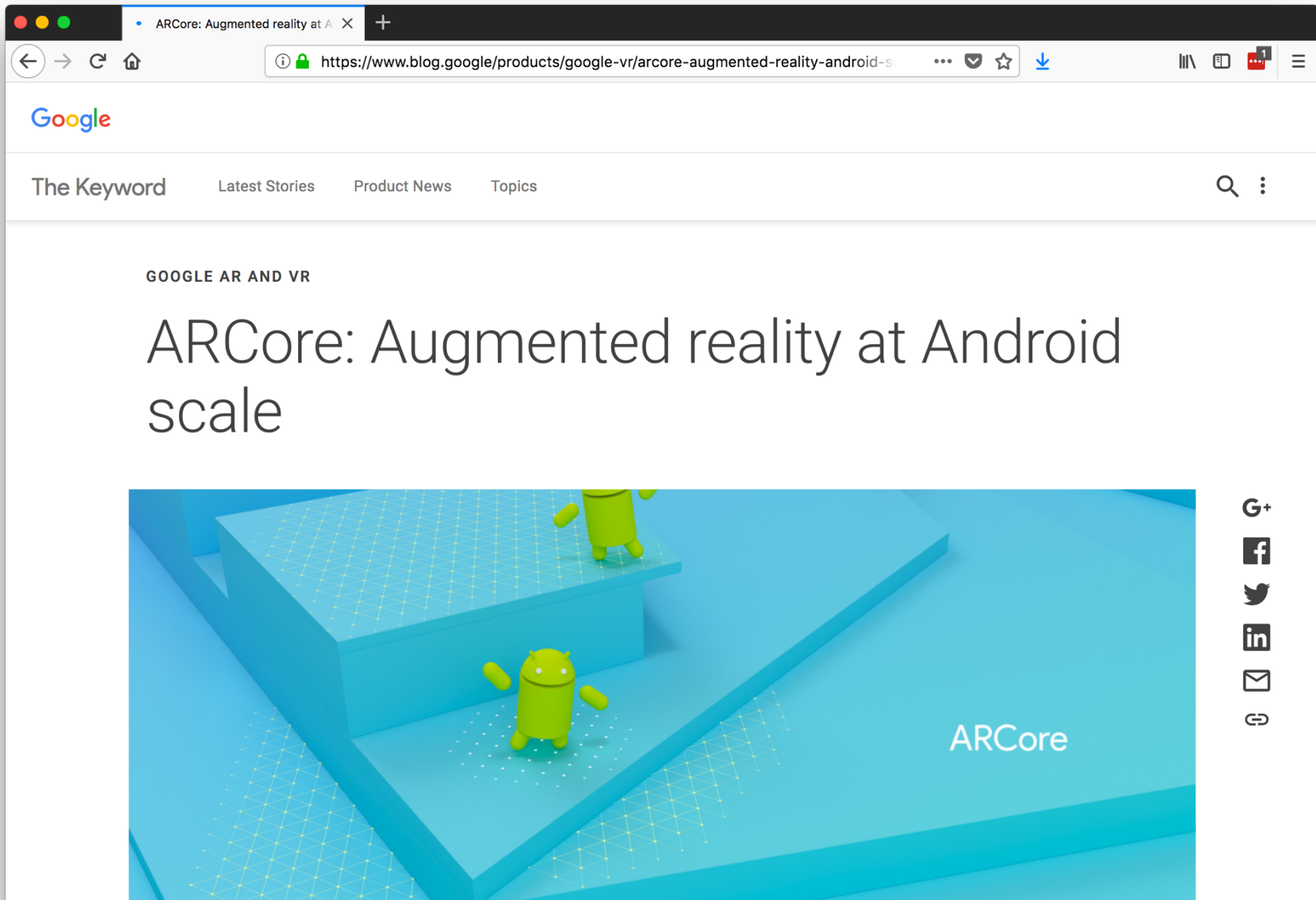


Apple today showed off a handful of new augmented reality demos to show the efficacy of



NOW TRENDING





Device Support

■ ARKit

- iPhone 6S+
- iPad Pros and Generation 5 regular iPads

■ ARCore

- Pixel, Pixel XL, Pixel 2, Pixel 2 XL
- Galaxy S8, S8+, Note8, S7 and S7 edge
- LGE's V30, V30+ (Android O only)
- ASUS Zenfone AR
- OnePlus's OnePlus 5

Google publicly launches ARCore

https://techcrunch.com/2018/02/23/google-publicly-launches-ar

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Google publicly launches ARCore 1.0 on 13 phones, will begin expanding Lens preview


Posted Feb 23, 2018 by Lucas Matney (@lucasmtny)

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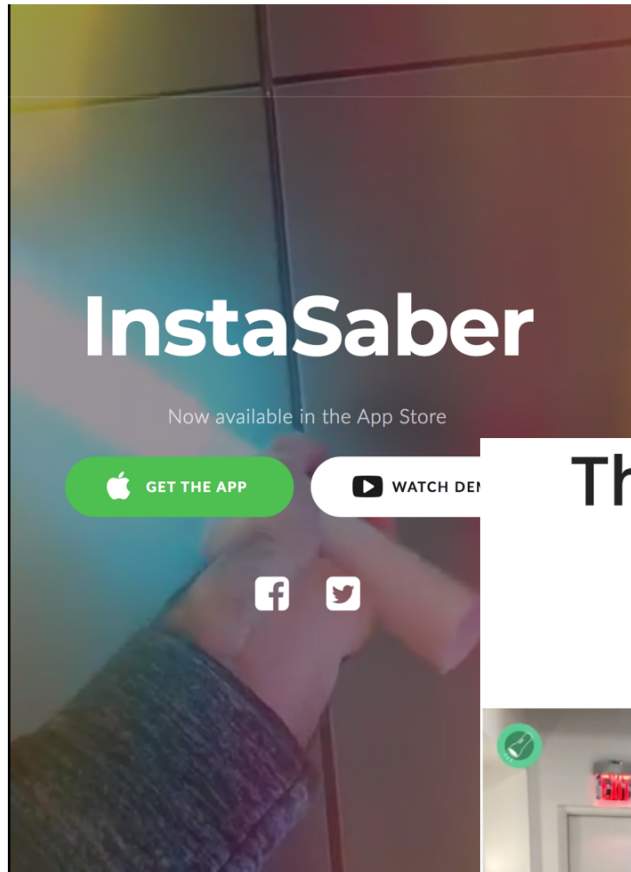
Next Story



After playing around in the experimental phase, Google is bringing its ARCore augmented reality platform to its 1.0 release with availability on over 100 million Android devices.

Waiting for images.taboola.com...



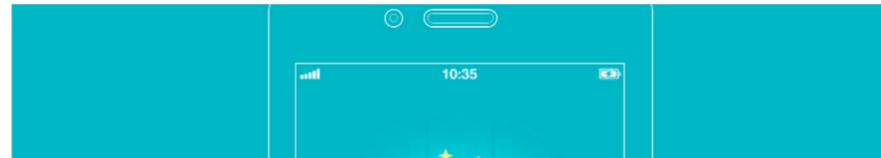


This AR app solves Sudoku puzzles using your iPhone's camera

Spoilers

By [Thuy Ong](#) | [@ThuyOng](#) | Sep 21, 2017, 10:28am EDT

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The AR Fart App We've All Been Waiting For

December 19, 2017 • by Jonathan Nafarrete




NOW TRE

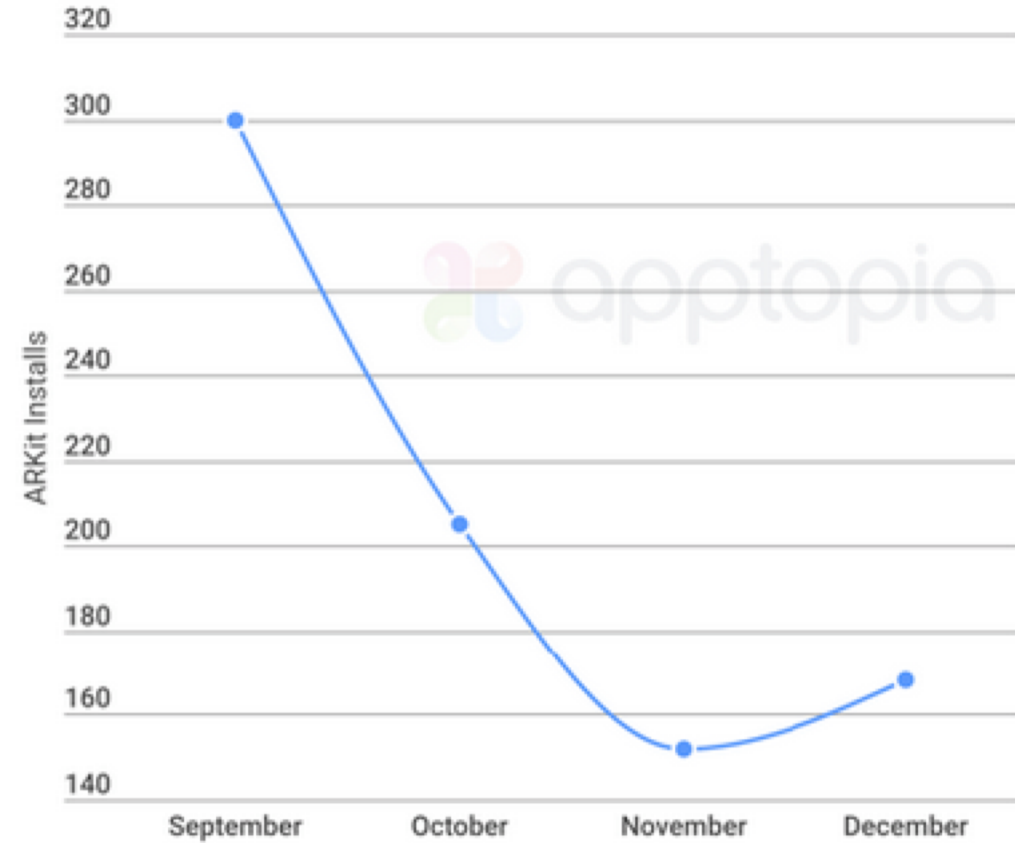
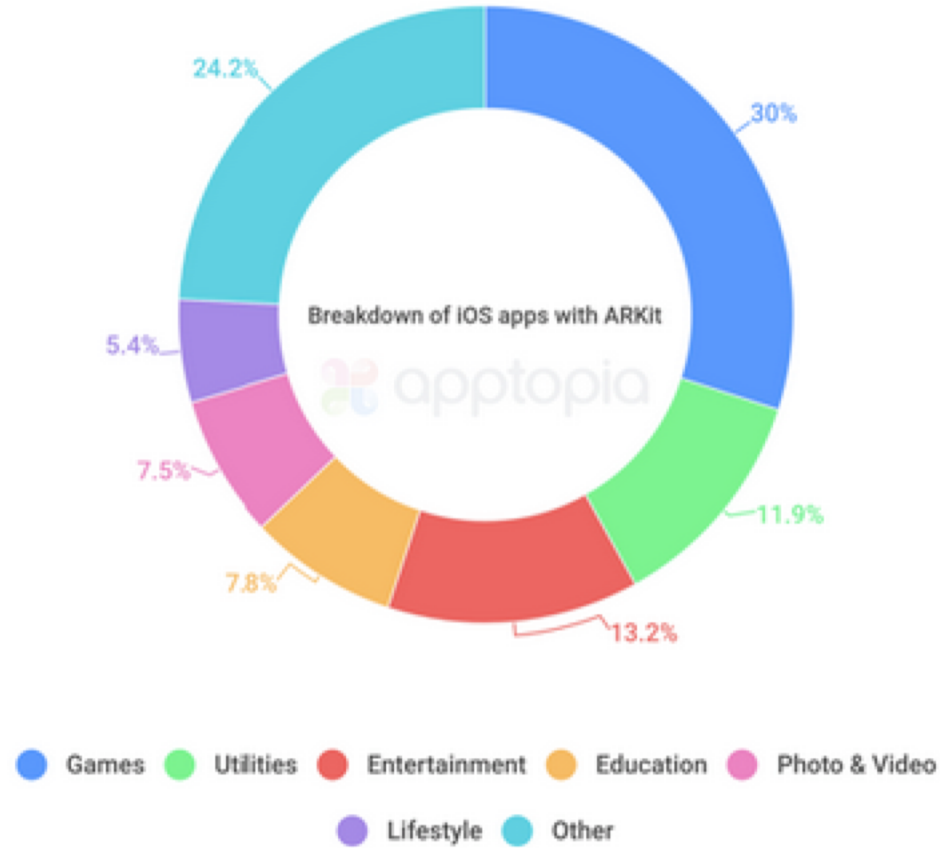


Report: Despite Apple's hype, early developer adoption of ARKit has been slow

Chance Miller - Jan. 3rd 2018 3:21 pm PT [@ChanceHMiller](#)

A man in a dark blue shirt and light blue jeans stands on a stage, looking towards the camera. Behind him is a large, dark screen with the words "Augmented Reality" written in white, sans-serif font. The screen occupies most of the background, and the man is positioned in the lower right corner of the frame.

Augmented Reality



All in all, Apptopia estimates that there are under 1,000 applications currently in the App Store that take advantage of ARKit.

Agenda

- ~~■ Brief history of AR~~
- ~~■ AR today~~
- Building AR apps w/JS





React Native



HippoAR/react-native-arkit: React Native binding for iOS ARKit

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GitHub, Inc. (US) | https://github.com/HippoAR/react-native-arkit

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React Native binding for iOS ARKit

arkit react-native augmented-reality ios objective-c

🕒 400 commits

🌿 15 branches

🏷 17 releases

👤 6 contributors

📜 MIT

Branch: master

New pull request

Create new file

Upload files

Find file

Clone or download

👤 macrozone Merge pull request #133 from gtfargo/master ... Latest commit 0404b04 10 hours ago

| | | |
|----------------------|-----------------------------------------------------------------------|--------------|
| 📁 components | fix assign bug | 22 days ago |
| 📁 hocs | add option to overwrite position | a month ago |
| 📁 ios | adds requiresMainQueueSetup to fix warning in rn 0.49+ | 8 days ago |
| 📁 lib | refactor | a month ago |
| 📁 screenshots | Update README.md | 6 months ago |
| 📄 .eslintrc | eslint | 6 months ago |
| 📄 .gitignore | [Issue 33] Solve Xcode 9 deprecated. [No Issue] Add Xcode .gitignore. | 4 months ago |
| 📄 ARKit.js | added onPlaneRemoved, eulerAngles and simple changelog | 22 days ago |
| 📄 CHANGELOG.md | update changelog | 22 days ago |
| 📄 CODE_OF_CONDUCT.md | Create CODE_OF_CONDUCT.md | 6 months ago |

EddyVerbruggen/nativescript-ar

← → ↺ 🏠

🔒 GitHub, Inc. (US) | https://github.com/EddyVerbruggen/nativescript-ar

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Augmented Reality NativeScript plugin

https://www.nativescript.org/blog/pre...

nativescript

nativescript-plugin

augmented-reality

📄 33 commits

🌿 1 branch

📦 4 releases

👤 1 contributor

📜 MIT

Branch: master ▾

New pull request

Create new file

Upload files

Find file

Clone or download ▾

👤 EddyVerbruggen Added repository

Latest commit 4b73f5e 7 days ago

📁 .github

Enjoy, world!

4 months ago

📁 android-lib-src

Android library typings added

2 months ago

📁 demo

Travis

16 days ago

📁 docs

Allow undefined plane material #2

3 months ago

📁 publish

Enjoy, world!

4 months ago

📁 src

Added repository

7 days ago

📄 .gitignore

Android support

3 months ago

📄 .travis.yml

Travis

16 days ago

📄 LICENSE

Bumped a few dependencies

28 days ago

📄 README.md

Android support

3 months ago

Snapchat buys Israeli augmented reality start-up for \$40 million: Report

Arjun Kharpal | @ArjunKharpal
Published 6:32 AM ET Tue, 27 Dec 2016



Snap Inc – the owner of Snapchat – has quietly acquired Israeli augmented reality (AR) start-up Cimage Media for a reported \$30 to \$40 million, according to a media report.

Cimage Media makes software that allows businesses or consumers to visualize what an item might look like in their environment. For example, the start-up works with Shop Direct to allow customers to see what furniture would look like in their home via a tablet.

This so-called augmented reality use is of interest to Snap Inc, considering Snapchat uses this technology in their lenses to let users turn their faces into animals for example.

Snapchat buys Lookery, a 2-year-old startup that lets you Photoshop your face while you video chat

 Alyson Shontell   
🕒 Sep. 15, 2015, 3:36 PM 🔥 19,111

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Snapchat has acquired facial recognition startup Lookery.

The deal was first flagged by Ain.ua, a Ukrainian publication, which states Snapchat purchased the startup for ~ \$150 million. Business Insider has



Lookery's app. Snapchat now offers that same selfie filter as a lens. Lookery

Recommended For You

 We gorged ourselves All You Can Eat Panc discovered why it was idea

Google buys Word Lens, the app that translates languages with your phone's camera

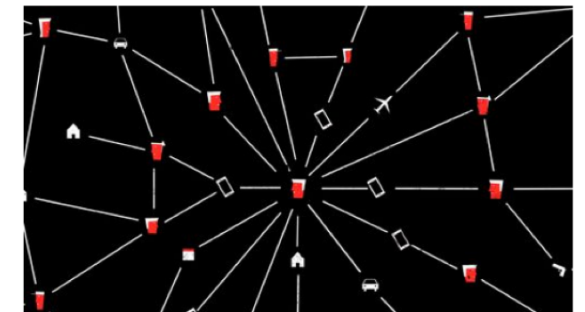
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By [Chris Welch](#) | [@chriswelch](#) | May 16, 2014, 2:50pm EDT

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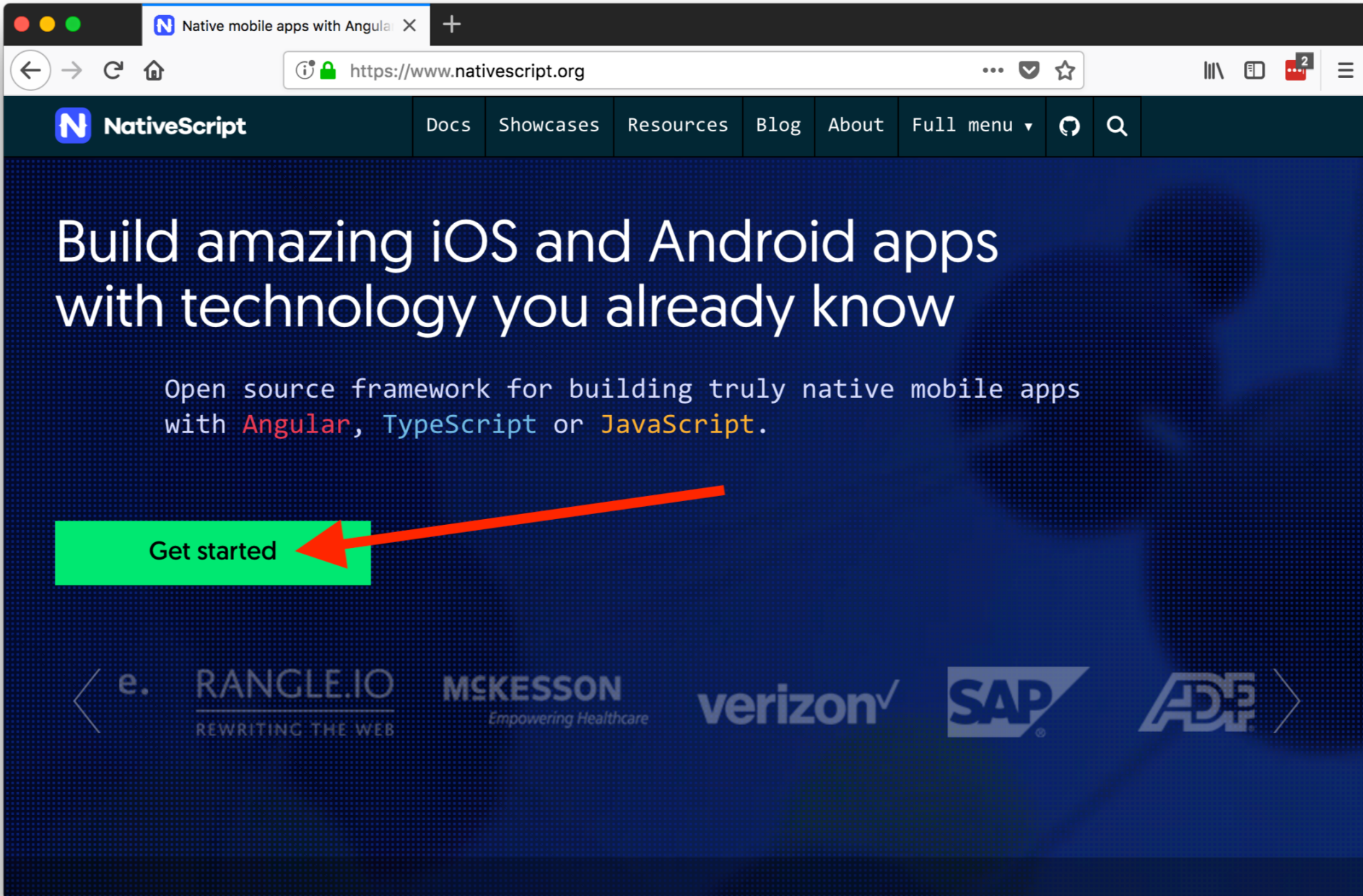


NativeScript AR



Summary

- AR is cool.
- AR is hard.
- It's probably a few years before AR is simple enough for your average developer to build something compelling with.

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Thanks!
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