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and ask questions**

READY, SET, IMMERSION!

Getting ready for the second coming of VR



Tero Huttunen & Florian Plank

“[Virtual Reality] is going to be more powerful than cocaine.”

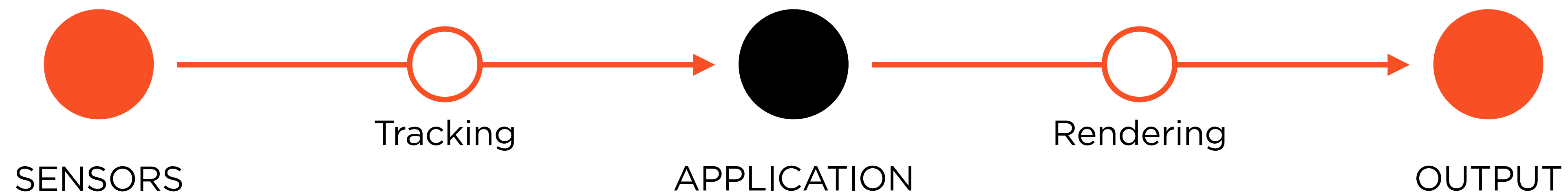
(Oliver Demangel)

VIRTUAL REALITY

VIRTUAL vs. REALITY

“A room within which the computer can control the existence of matter. A chair displayed in such a room would be good enough to sit in. Handcuffs displayed in such a room would be confining, and a bullet displayed in such a room would be fatal. With appropriate programming, such a display could literally be the Wonderland into which Alice walked.”

(Ivan Sutherland, 1965)



USE CASES



Entertainment

<http://www.landsendgame.com/>



Telepresence



Education

COMMUNICATION



**Infrastructure only matters
to creators or once it fails.**

IMMERSION

Presence

1. **A stable spatial place**
2. Interaction
3. Self-embodiment
4. Social communication

1. A stable spatial place
- 2. Interaction**
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Breaking presence

PERCEPTION

Nothing is what it seems



CONTENT

Captured vs. Synthetic content

Design for empathy



*“If someone falls on their face
right next to you, it’s not funny.”*



**Be smart, keep it simple
and avoid the uncanny valley.**

Fundamentals

Always maintain head tracking

Allow for free movement

Move with constant speed

Provide multiple points of reference

Provide depth cues

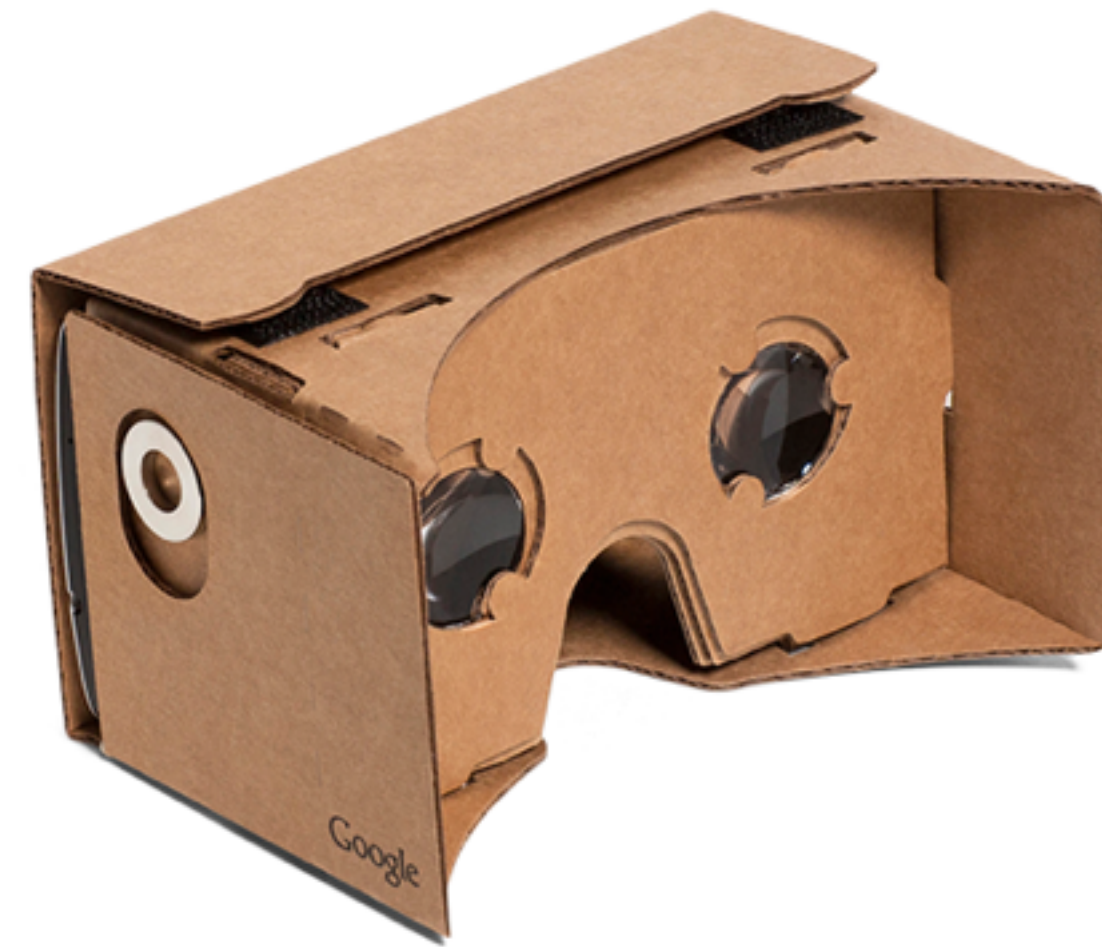
Avoid text, use audio feedback

An isometric illustration of a virtual reality environment. The floor is composed of green rectangular blocks of varying heights, creating a stepped effect. Three blue, bottle-like objects are positioned on the blocks. The middle bottle has a white circle with a plus sign on its side. A dashed white line extends from this circle towards the right, passing through the text 'Use a reticle' and ending at an orange VR headset. The headset is shown from a side-on perspective, revealing its eye lenses and front-facing camera. The text 'Use a reticle' is written in a bold, white, sans-serif font.

Use a reticle

ISSUES

HARDWARE



AVAILABILITY

Today



Samsung GEAR VR



Google Cardboard

Q1 2016



Oculus Rift



HTC Vive

During 2016



PlayStation VR

UNDERDOGS



Zeiss VR One

A WORD ON AUGMENTED REALITY



Google Glass



Microsoft Hololens

PERIPHERALS







TECHNICAL DETAILS

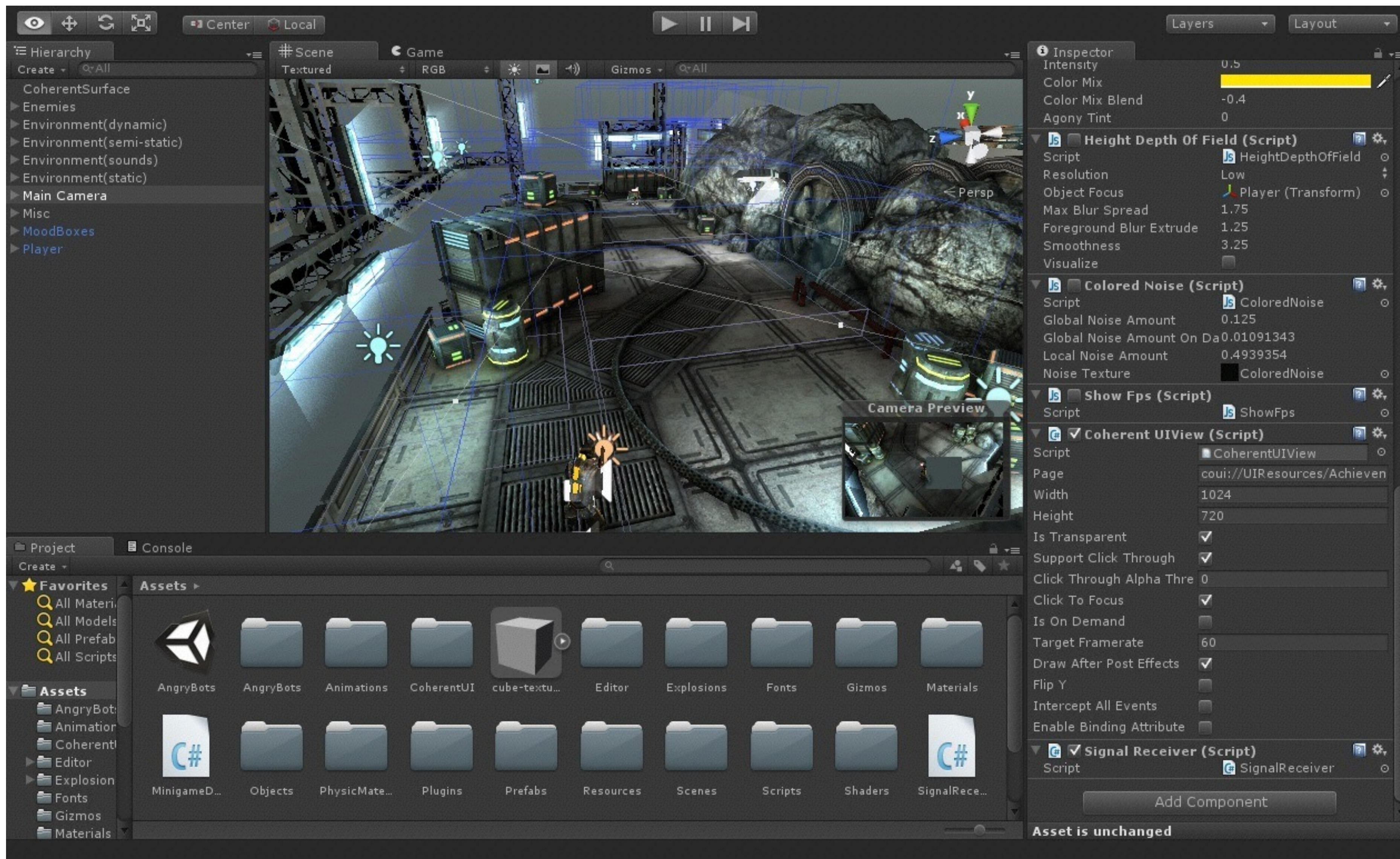
The specific device doesn't matter

SOFTWARE

SDKs

Game Engines





Performance

WebVR

WHERE DO I START?

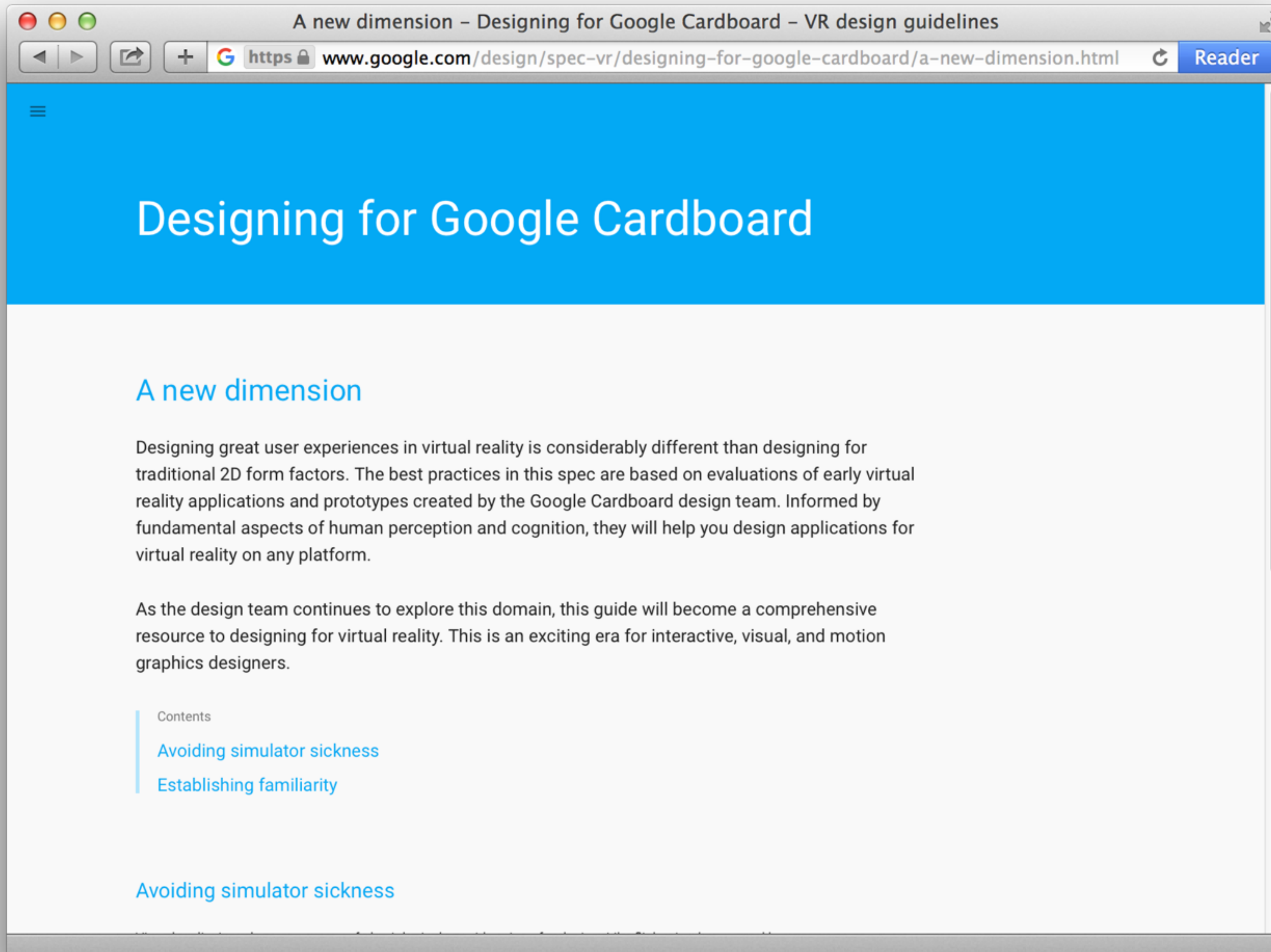
1. Learn 3D basics
2. Get a Gear VR
3. Get Unity 3D
4. Make something cool

The VR Book

*Human-Centered Design for
Virtual Reality*

Jason Jerald, Ph.D.





STATE OF THE UNION

The technology is still
really, really young.

All major players agree
on the big questions.

There's a lot of white spots on the map.

THANKS!



Tero Huttunen & Florian Plank (@polarblau)

siili.com



Please

**Remember to
rate session**

Thank you!