

# NVIDIA GPU, 开启VR世界的钥匙

STEVEN JIN, DIRECTOR OF CORPORATE COMM.

# 10

GAMING PERFECTED

# VR GROWING FAST

600+

COMPANY

40,000

EMPLOYEE

\$3.8B

FOUNDING

VR/AR Revenue=\$15B By 2020

# VR EVERYWHERE



Gaming



Design



Entertainment



News



Real estate



Art

# 7X MORE DEMANDING

PC GAMING = 60 MP/S

(1920 X 1080 @ MIN 30 FPS)

1080



1920

VIRTUAL REALITY = 450 MP/S

(3024 X 1680\* @ MIN 90 FPS)

1680



1512



1512

\*VR render resolution

# GEFORCE GTX 1080-7X VR PERF.



# NVIDIA VRWORKS

OCULUS RIFT AND HTC VIVE INTEGRATION | EPIC, MAX PLAY AND UNITY GAME ENGINES

**AVAILABLE NOW**

GAMEWORKS

**VRWORKS**

DESIGNWORKS

DRIVEWORKS

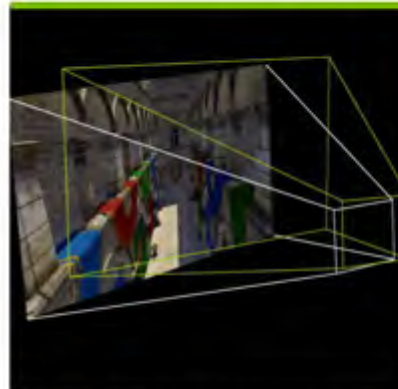
JETPACK



Multi-Res Shading



VR SLI



Context Priority



Warp and Blend

and other technologies such as:  
Direct Mode, GPUDirect for Video

# MULTI-RESOLUTION SHADING





# MULTI-RESOLUTION SHADING

STANDARD RESOLUTION





# MULTI-RESOLUTION SHADING

MULTI-RESOLUTION



# MULTI-RES 50% FASTER ON UE4



Image: UE4 Reflections Subway, courtesy of Epic Games

# COMPUTING CHALLENGES IN SIMULATING REALITY

GRAPHICS

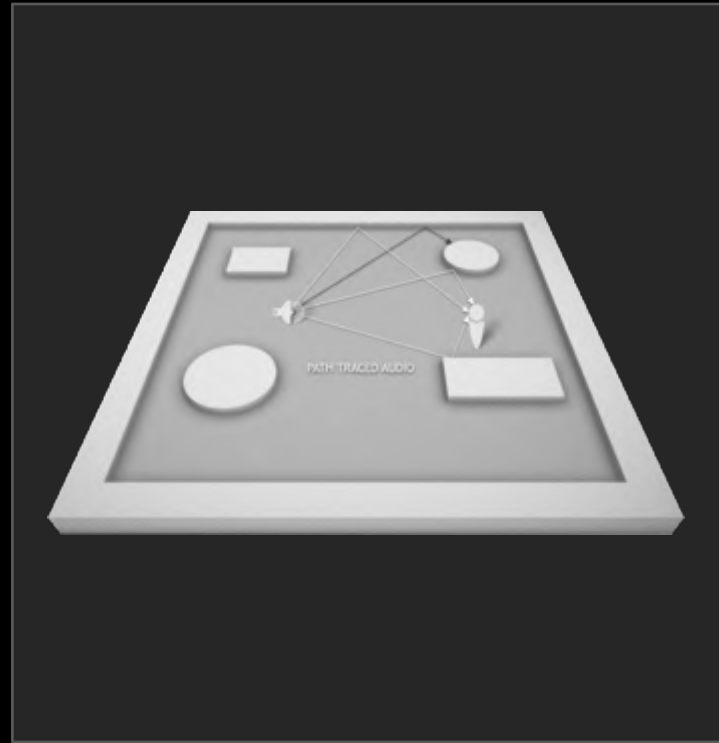
AUDIO

TOUCH

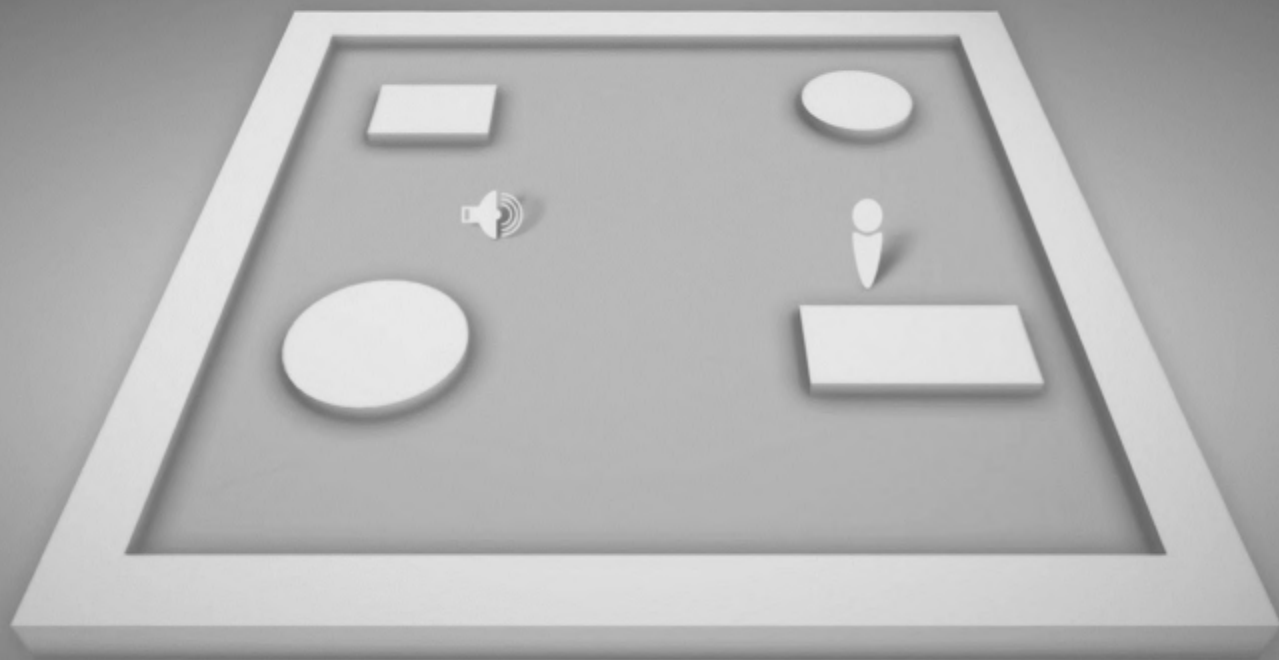
PHYSICAL  
SIMULATION

# INTRODUCING NVIDIA VRWORKS AUDIO

Path Traced Audio



# NVIDIA VRWORKS AUDIO



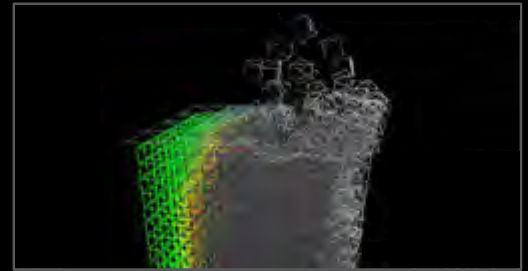
# PHYSICAL SIMULATION IN VR



PHYSX



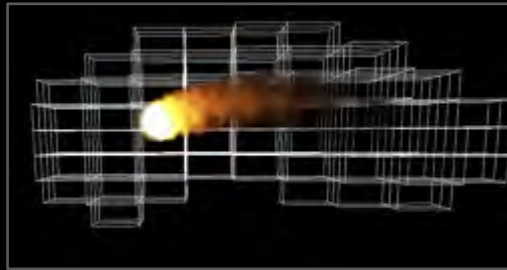
FLEX



DESTRUCTION



HAIRWORKS



FLOW



CLOTH

# DEMO



**VR FUNHOUSE**



AVAILABLE AT



Steam® VR

OPEN SOURCE THIS  
SUMMER



# PERFECT 10

GEFORCE GAMING PERFECTED



ANSEL



VRWORKS



GTX 1080  
GTX 1070  
GTX 1060



SIMULTANEOUS  
MULTI-PROJECTION