

## Livestreaming VR Games: 'SUPERHOT VR' and 'Surgeon Simulator: Experience Reality'

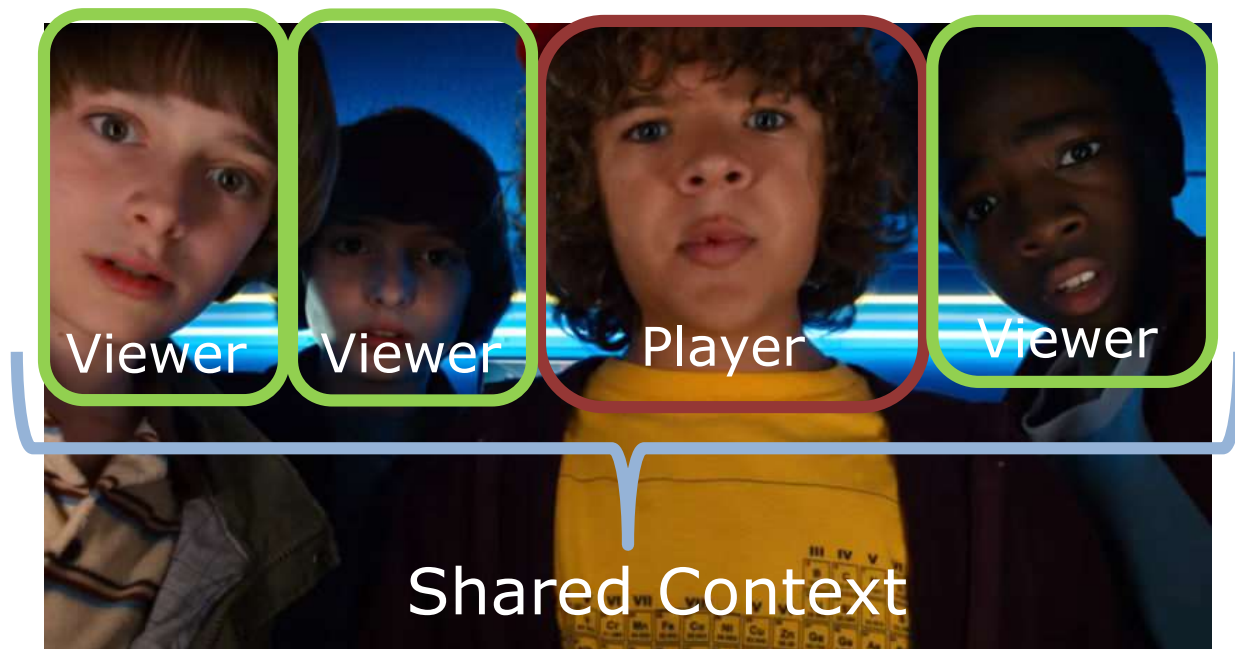
**Dan Rubenfield**  
CTO, VREAL

**Brett Holton**  
VP of Engineering, VREAL

# Nature of Context : Arcade games



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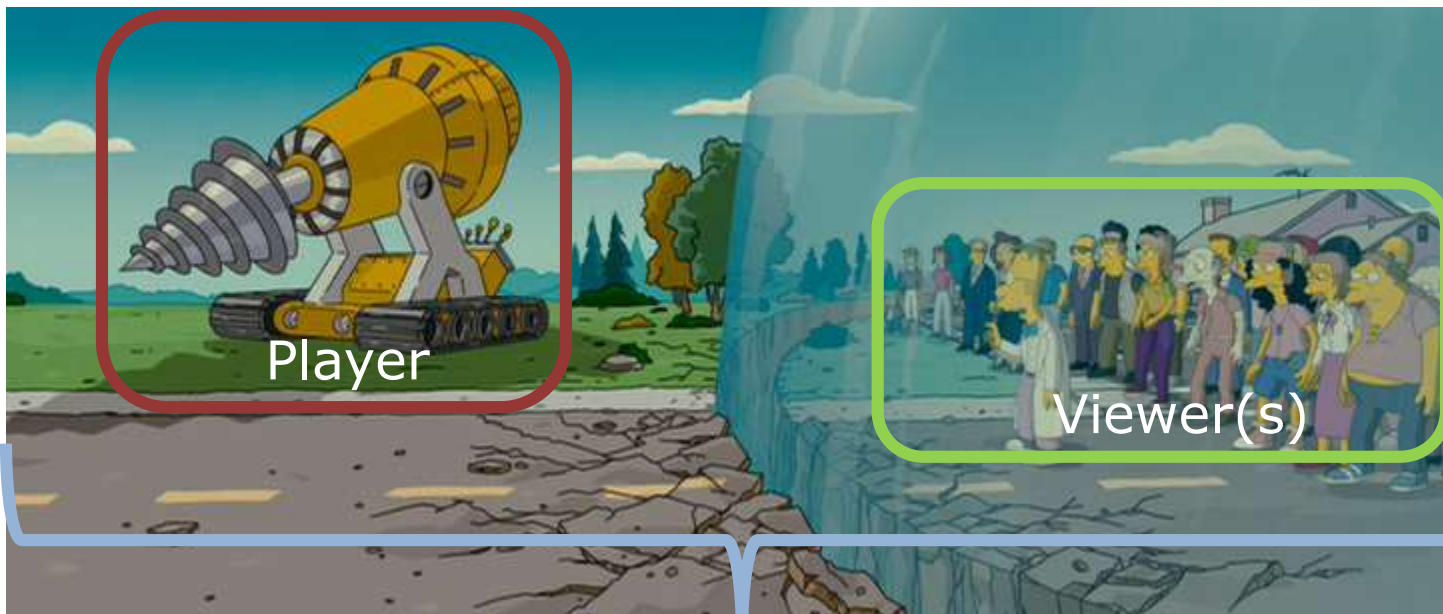


# Nature of Context : Arcade games





# Nature of Context : Twitch



# How do we share content from VR?



I am legally obligated to include a Lawnmower Man image in VR Presentations

# Capture 2d video from headset

- OBS
- Pretty rough on viewers
- 0 DOF
- Possible perf hit(small)
- Easy



# 3D Scene Capture

- 3D Ripper, Shims, etc
- Captures
  - geometry
  - maybe textures and shaders
- Culled data stream
- 6 DOF

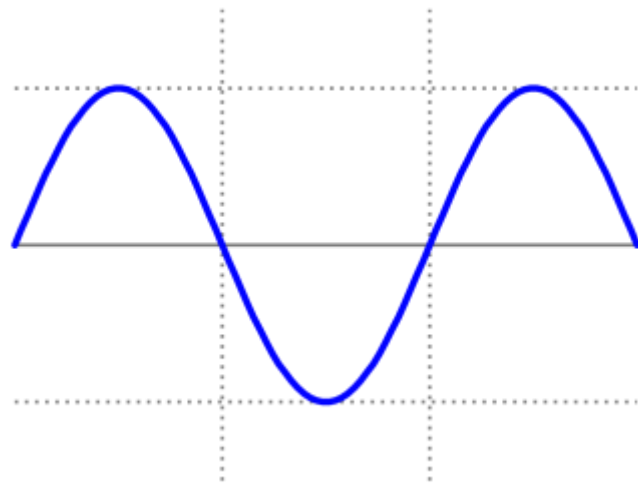


\*I'm not adding semi-witty notes explaining the Wizard of Oz.



# Capture 360 video from the game

- Performance challenges
- 3 DOF
- Possible vection issues
- Still pretty easy



Framerate\*

\*Simulated Framerate. Not an actual measure of performance. I am sure there are clever people that can minimize the impact of a cubemap capture, but there is always an inherent impact to rendering the game from a different camera perspective. If you manage to figure out how to remove that overhead for rendering arbitrary things, We'd love to talk to you since that's awesome.

# What about Network Capture?

- Requires Multiplayer
- Need to capture at server
- Non-playable viewing client becomes more difficult



# So What's left?









# Native VR Replay – Surgeon Sim



# Native VR Replay – Surgeon Sim



# Native VR Replay - Superhot







# Questions?

