



# **| AR Fundamentals & Use Cases**

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# Session Learning Goals

## XR Orientation

2D vs 3D Design

Levels of Immersion

What is XR? AR vs MR vs VR

Hardware Limitations

XR Technologies

## AR Use Cases

Categories of AR

Cross Category Use Cases

Choosing an Approach

Emerging Technologies

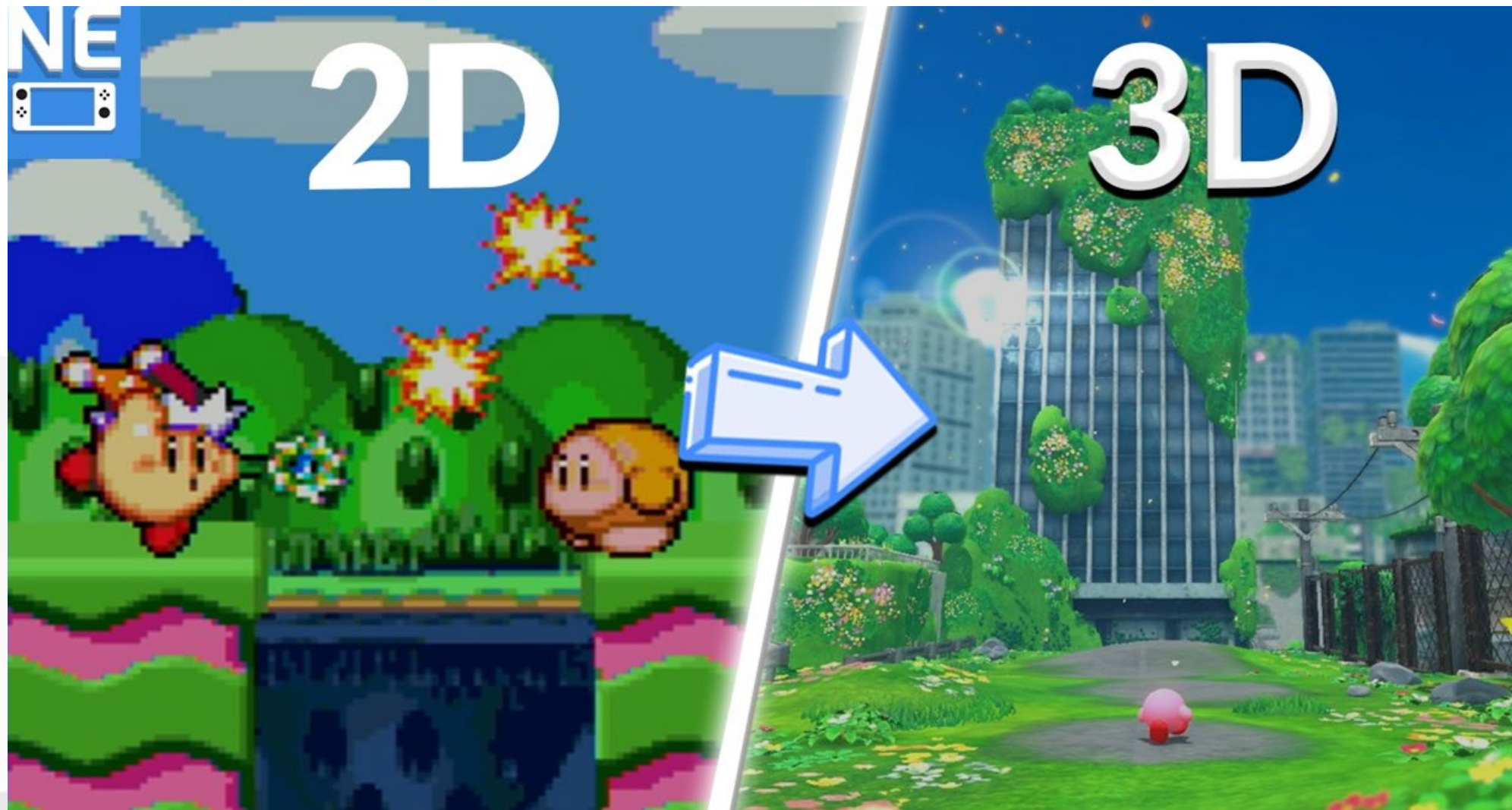
Q&A

# | XR Orientation

# 2D vs 3D







## Low Immersion



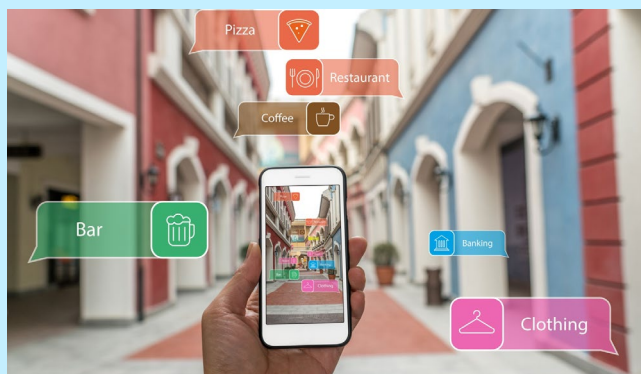
## High Immersion





# XR – Extended Reality

AR: Augmented Reality



MR: Mixed Reality



VR: Virtual Reality



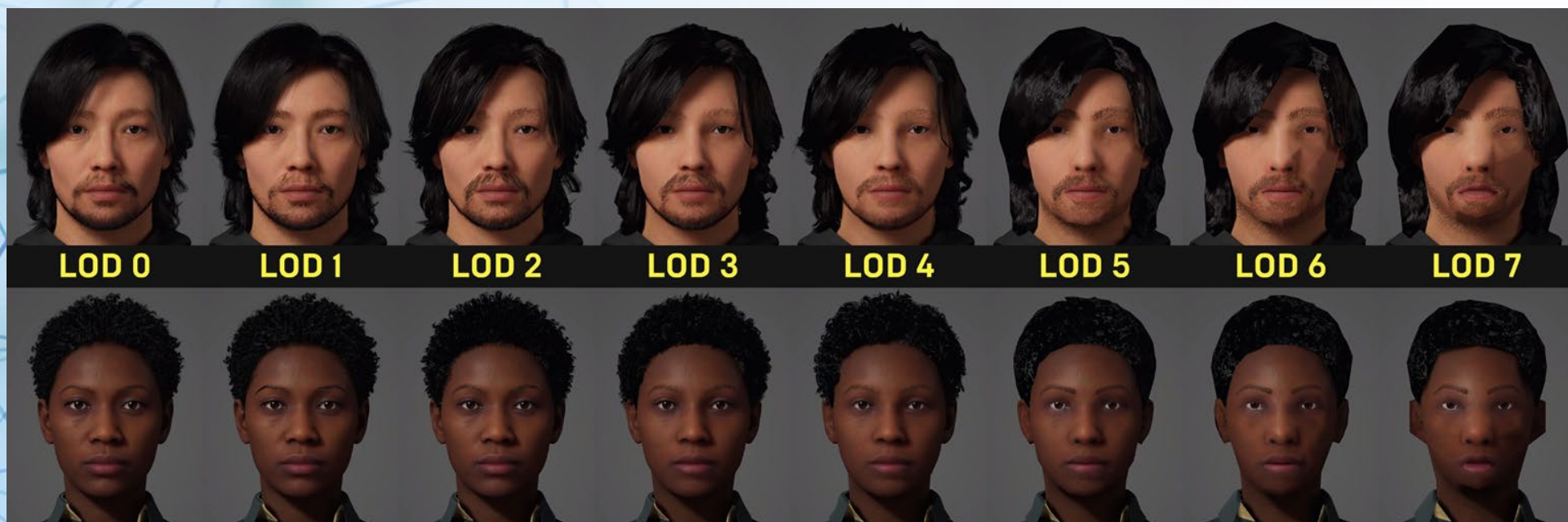


# XR Hardware Limitations

Expensive PC

Low-End PC

Mobile/Headset



# AR Devices

## Mobile

Pros:

Relatively Inexpensive

Larger Audience

Cons:

Less Immersive

Limited Interactions

## Headset

Pros:

More Immersive

Hand Tracking (when supported)

Cons:

More Expensive

Less Scalable



# AR Technologies

## App-Based

Pros:

Better Performance

Greater Functionality

Cons:

More Expensive

Smaller Audience

## Web AR

Pros:

Instantly Accessible

Wider Audience

Cons:

Less Performant

Bandwidth Dependant

# VR Devices

## Headset

Pros:

Relatively Inexpensive

Larger Audience

Cons:

Low-End Experience

Limited Performance

## PC VR

Pros:

More PhotoReal

More Immersive

Cons:

More Expensive

Smaller Audience



# | AR Use Cases







# Education





# Productivity





# Promotion

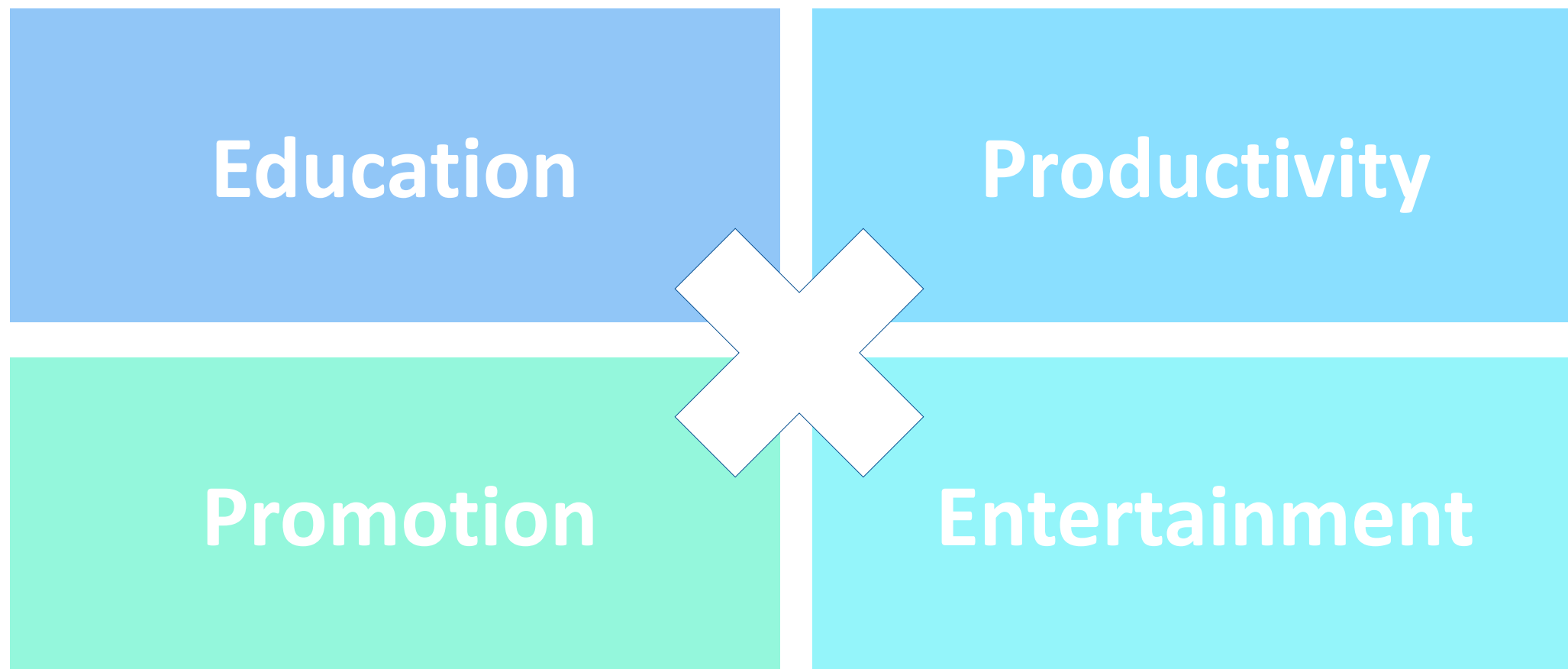






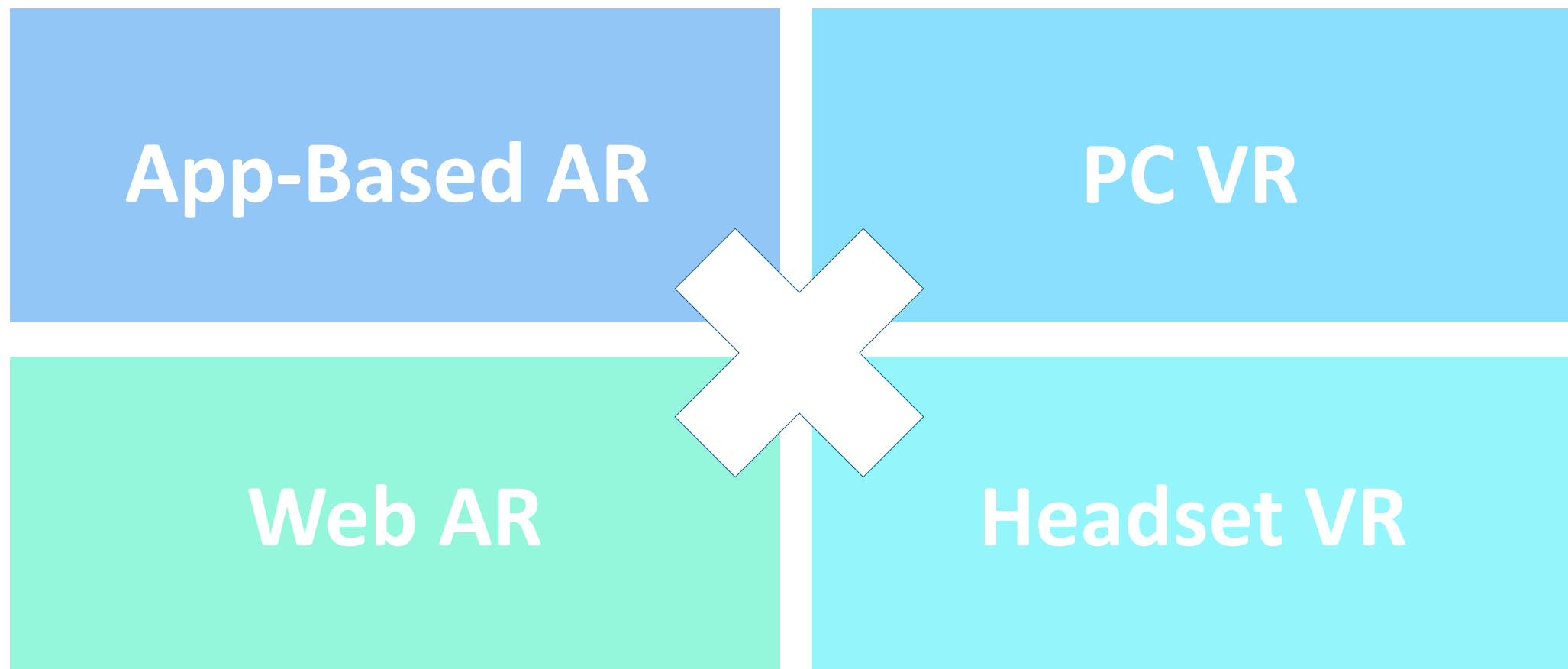
# Entertainment


# Cross Category XR






# Cross Category XR



A stylized digital landscape featuring a large, bright orange sun in the center of the sky. The ground is a grid of glowing blue lines that recede into the distance. The mountains are rendered in a wireframe style with blue and orange outlines. The overall color palette is dominated by orange, blue, and black.

**| What XR/Metaverse/Web3  
| approach is right for you?**



A surreal landscape featuring a large, bright orange sun in the sky. The ground is a grid of glowing blue lines that recede into the distance. The mountains are rendered in a wireframe style with blue and orange outlines. The overall color palette is dominated by orange, blue, and black.

**| Start with Project Goals and  
Key Performance Indicators**

# Audience

**Free**

**Paid**





# Project Budget/Scope

**Small Budget**

**Big Budget**

**Short Time**

**Ample Time**

# Logistical Challenges

**UX Design**

**Asset Creation**

**Development**

**Maintenance**

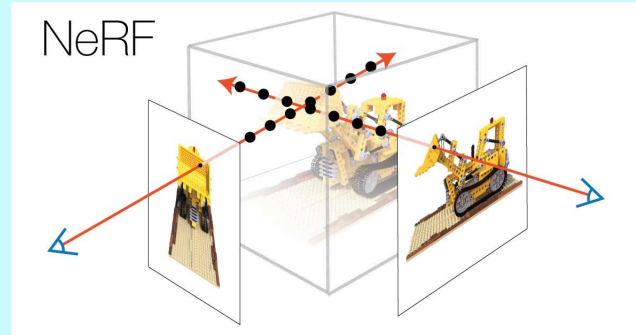


# Technologies to Watch

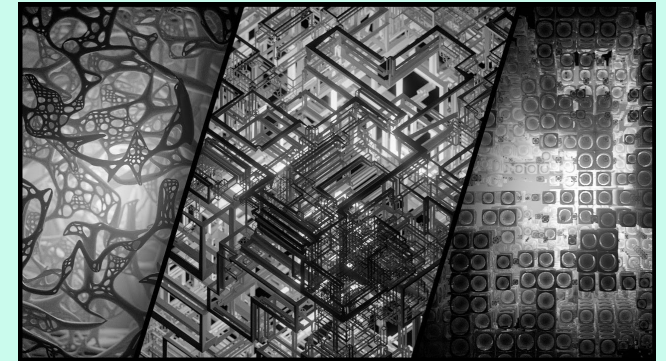
Photogrammetry



NeRfs: Neural Radiance Fields



Generative AI









# Q&A



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