



**PEARL**

# VR Workflows

Using Google Tilt Brush, Pixar USD and Unity

LA Pipeline Developers Meetup

<https://www.meetup.com/en-AU/LA-Animation-and-VFX-Pipeline-Developers-Meetup/events/254858357/>

# Introduction

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Department Technical Director  
*Over The Moon by Glen Keane*  
Pearl Studio/Netflix Animation



# VR living in interesting times.

Virtual/Augmented reality appliances and applications are slowly becoming mainstream

- Manufacturing,
- Automobile,
- Education,
- Gaming
- VFX/Animation

I am personally excited about the last domain and have started embracing VR since last year.



# VR at Pearl Studio

We are exploring ways to develop simple/intuitive workflows and solutions for the following departments

- Visual Development
- Previsualization



# Building Blocks

Hardware :

HP Windows Mixed Reality Headset and HTC Vive

Software :

Google Tilt Brush and Unity

Pipeline and Workflow:

Autodesk FBX/Pixar USD, Tilt Brush Toolkit, Unity USD SDK, Unity EditorXR,  
Various runtime interaction toolkits



# Demo Time

Google Tilt Brush

Pixar USD for Unity (preview)

Unity Labs EditorXR

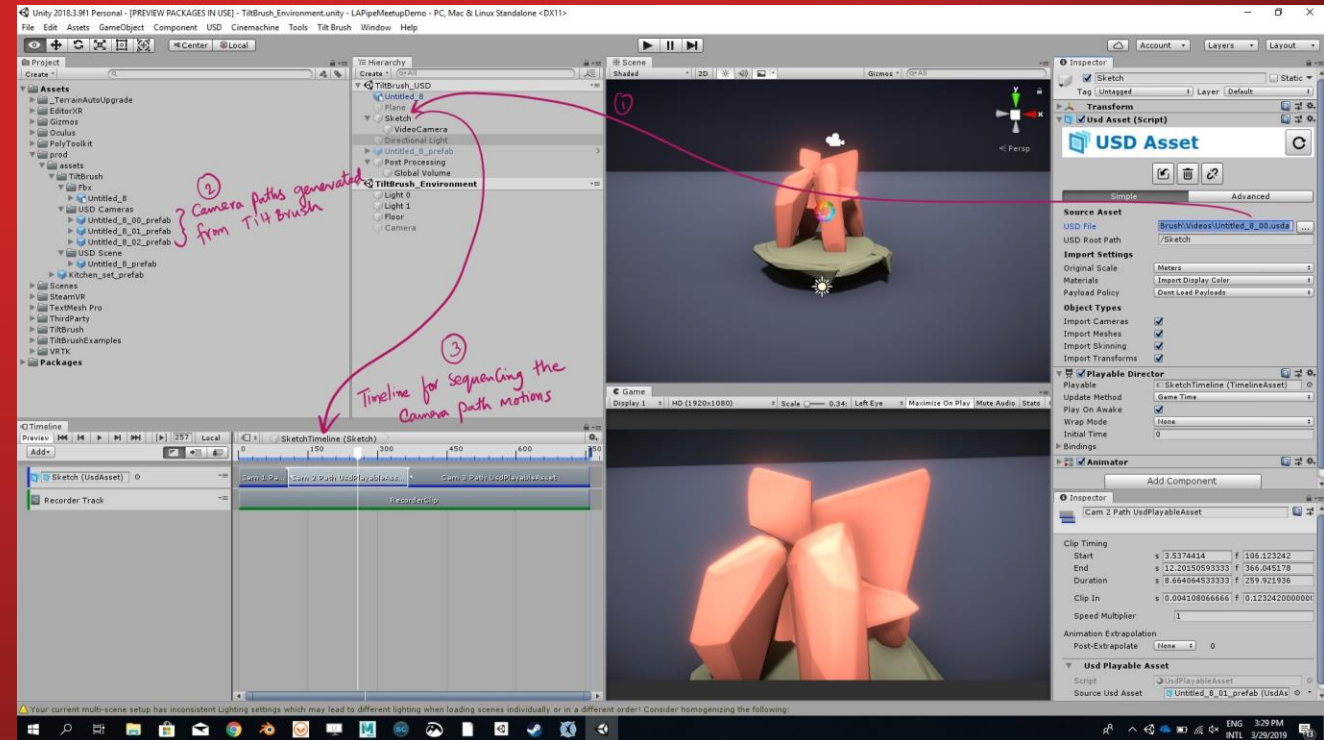
# Google Tilt Brush

- [tiltbrush.com](http://tiltbrush.com)
- Exports Autodesk FBX and Pixar USD (Geometry and Camera Paths)
- [github.com/googlevr/tilt-brush-toolkit/](https://github.com/googlevr/tilt-brush-toolkit/)
  - Python API
  - Unity SDK

In this demo you can see how we can reconstruct the scene in Unity.

You can see the demo at

<https://youtu.be/EVMVgeTXFzs>





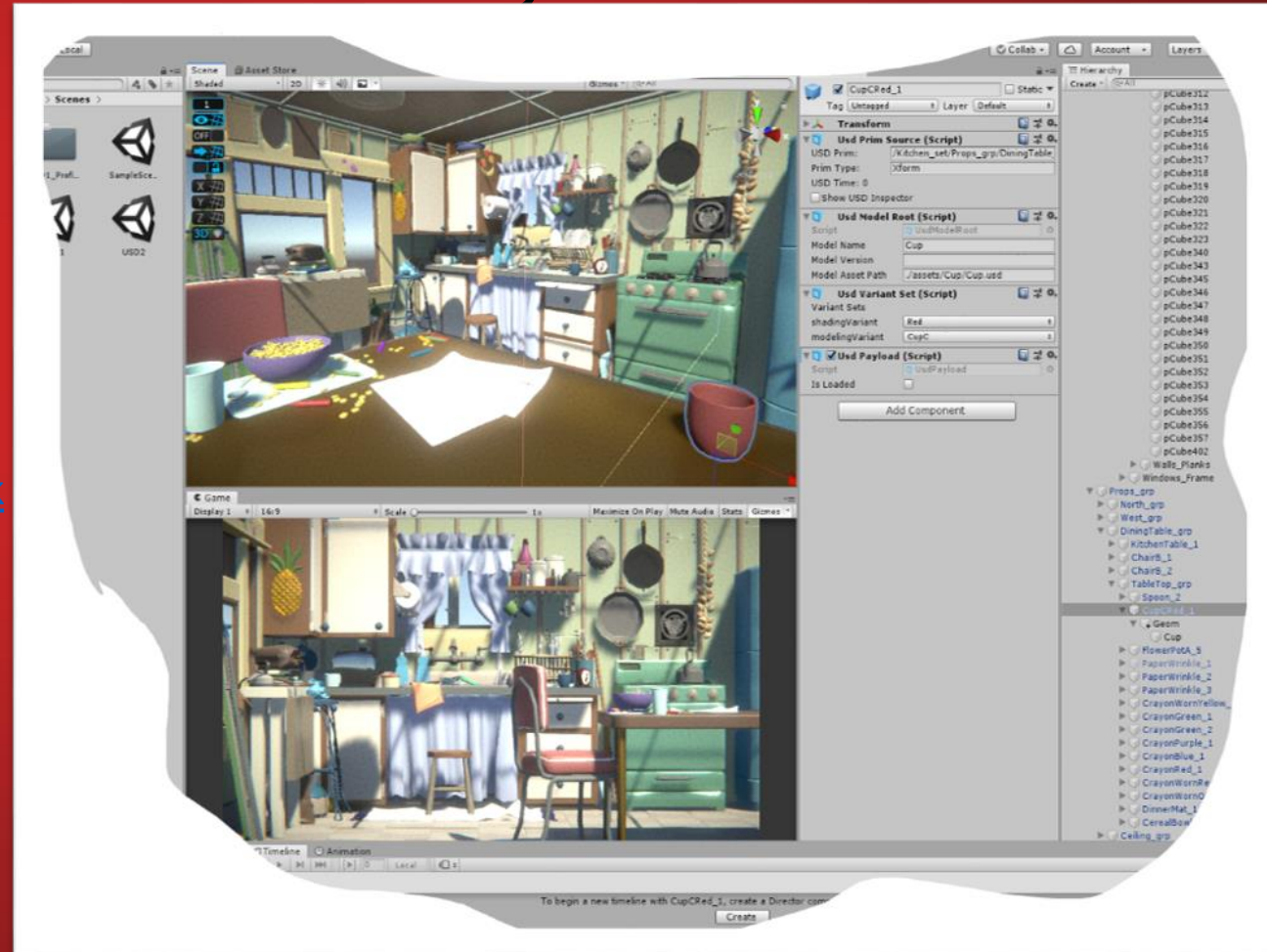
# Pixar USD for Unity

Pixar's Universal Scene Description (USD) is a file format designed for large-scale asset pipelines, with a focus on parallel workflows.

You can load/save Pixar USD files in the Unity Editor and Runtime.

[github.com/Unity-Technologies/usd-unity-sdk](https://github.com/Unity-Technologies/usd-unity-sdk)

[graphics.pixar.com/usd/downloads.html](https://graphics.pixar.com/usd/downloads.html)

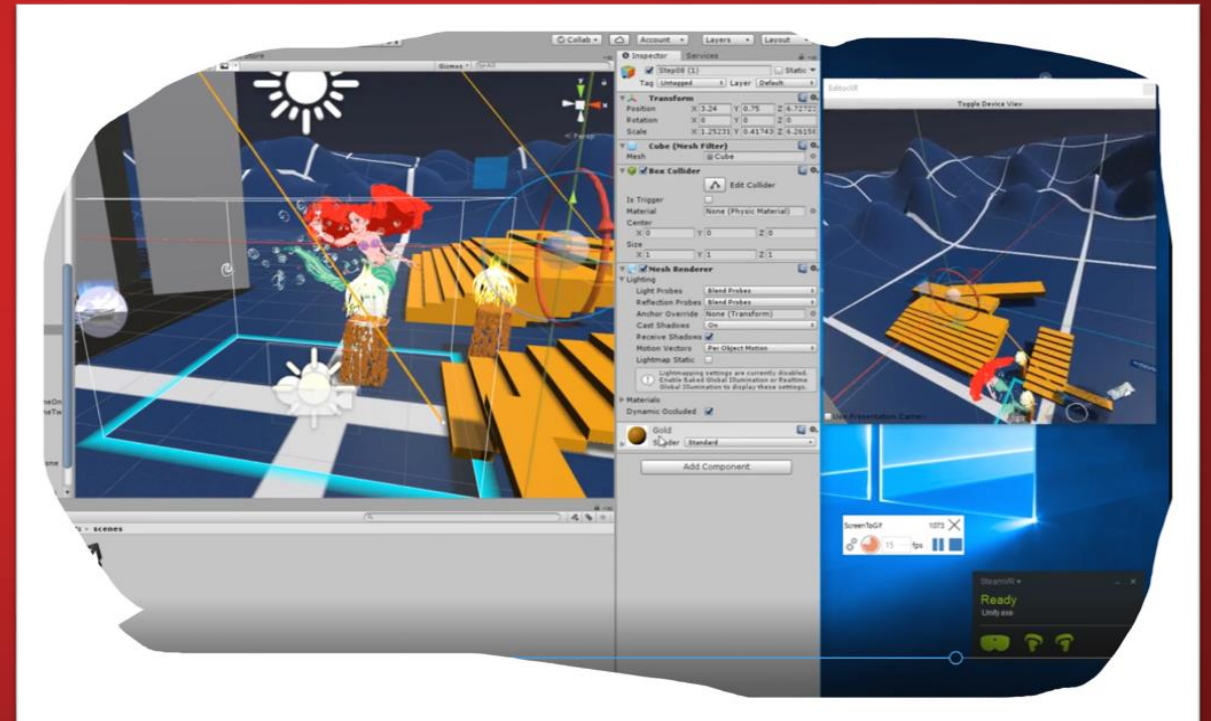


# Unity EditorXR

Easily make VR tools and run them in Unity.

You can put your headset on and then edit the 3D scene in VR.

- [github.com/Unity-Technologies/EditorXR](https://github.com/Unity-Technologies/EditorXR)
- [EditorXR Getting Started](#)



Ariel sketch by Glen Keane  
(Exported from Tilt Brush)



# Thank You

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