

# IMMERSIVE ENVIRONMENT WORKSHOP | 13 & 20 AUGUST 2020

All activities will be recorded for studio documentation purposes. Please download all related software and programs prior to W1.

Contact [millennialnomadspace@gmail.com](mailto:millennialnomadspace@gmail.com) for any queries.

## WEEK 1, 13 AUGUST, THURSDAY

0900-1230

### INTRODUCTION:

Studio Brief, Schedule, Studio and Safety Rep

1230-1300

### BREAK

1300-1500

### UNREAL ENGINE: BLOCK CATCHING ADVANCED

Mitch Goh

Block Catching Advanced demonstration and play  
Note: BCA was built in 4.24.3.

Demonstrate the fundamentals of getting an Unreal project up and running. As well as the pipeline from Sketchup Model to Unreal Blueprint.

1. Introduction to ThirdpersonExampleMap
2. Create your own Level
3. Introduction to ThirdpersonCharacterBP
  
4. How to export from Sketchup (.fbx)
5. FBX Import settings into UE4 as Static Mesh
6. How to map Materials + enable Collision
  
7. How Static Mesh works in Level Map
8. How to set up Persistent Level (good for team work)
9. How to setup Actor BP with Lights
  
10. How Blueprint works in Level Map
11. Introduction to BP Event Graph (for visual scripting)
12. Introduction to Widget Blueprint (User Interface)

1500-1530

### BREAK

1530-1730

### MAYA AND UNITY FOR VRCHAT

Perrine Hoo, Rachel Sim

Students will learn how to set up Unity for world creations in VRChat and basic modelling in Maya. Students will also get to try out VRChat using HTC Cosmos and decide if it's a medium they would like to use.

Programme:

1. Introduction to VRChat and project
2. [Download Unity] Basic Unity for VRChat and VRChat tutorial
3. [Download Maya] Basic Maya tutorial
4. Interested students to test VRChat

1. To sign up and install **Steam** client.  
<https://store.steampowered.com/about/>

2. To download latest **BCA** from:  
<https://drive.google.com/drive/folders/1MytnECmCZ8D-1pYwngGLyScSgp78Pru3>

3. Make an account and download **Unreal Engine 4 (Version 4.23)** Steam VR input can only be downloaded up to this version.  
<https://www.unrealengine.com/en-US/>

1. To sign up and install **Steam** client  
<https://store.steampowered.com/about/>

2. To download **Autodesk Maya 3D** student version (1 year)  
<https://www.autodesk.com/education/free-software/maya>

3. To download **Unity 2018.4.20f1** (free)

## WEEK 2, 20 AUGUST, THURSDAY

**0900-1230** **STUDIO PRESENTATIONS:**  
Invisible Cities interpreted (2D / 3D)

**1230-1300** **BREAK**

**1300-1500** **UNITY AND UNREAL ENGINE**  
Thomas Poh

Learn how to use and navigate Unity. As well as setup VR on both Unity and Unreal.

**Download Unity (latest version)**

**Download Unreal (4.2.3)**

**Update your DirectX**

**Install the latest Microsoft Visual C++ (For Unreal Engine to speed it up)**

<https://support.microsoft.com/en-sg/help/2977003/the-latest-supported-visual-c-downloads>

10 minutes per presentation

1.To sign up and install **Steam** client.

<https://store.steampowered.com/about/>

2.Install **Steamvr** via the installed steam. Will be needed for Twinmotion, Unreal and Unity

3.Download **Unity Hub** Link below

<https://unity3d.com/get-unity/download>

4.Install the latest version of the **Unity Engine** from **Unity Hub**

5.Install **microsoft visual studio 2019** when UNITY Hub asks what modules you want to install.

**(MUST INSTALL FOR BOTH UNREAL AND UNITY IF YOU NEED TO CODE!!!)**

6.Download **SteamVR plugin** from Unity Marketplace

<https://assetstore.unity.com/packages/tools/integration/steamvr-plugin-32647>

7.Make a new project (Take the option 3d and not HDRP and LWRP!!) and download SteamVR into the project. Downloading usually takes a while in Unity.

8.Make an account and download **Unreal Engine 4 (Version 4.23!!!!)** Steam VR input can only be downloaded up to this version.

<https://www.unrealengine.com/en-US/>

9.Download **Steam VR input** from GitHub **(Version 4.2.3!!!)**

[https://github.com/ValveSoftware/steamvr\\_unreal\\_plugin](https://github.com/ValveSoftware/steamvr_unreal_plugin)

10. Double click the Blue Unreal logo you see to open up the project to open the Steam VR project.

**1500-1530 BREAK**

**1530-1730 TWINMOTION, TILTBRUSH, ADOBEXD**

Konn, Kai Xiang

**Hololens**

- Learning the differences between Mixed Reality (MR) and Virtual Reality (VR)
- Demonstrate the capabilities that a Hololens affords
- Importing models from 3D modelling softwares

**Twinmotion**

- Learn how to use and navigate Twinmotion
- Live syncing with 3rd party modelling software
- Preparing of 3D models from 3rd party modelling softwares for import into Twinmotion

**Tiltbrush**

- Importing models from 3D modelling softwares
- Learn various controls on the HTC handset with respect to a space generated in Tiltbrush
- Demonstrate the virtual possibilities of Tiltbrush

**Adobe XD**

- Learn how to create mobile app simulations for presentations without the actual coding

1. Download **Twinmotion 2020** (Need to have **Epic Games** account first)

<https://www.unrealengine.com/en-US/twinmotion>

2. Download **Twinmotion 2020 Direct Link Plugin**

<https://www.unrealengine.com/en-US/twinmotion/plugins?lang=en>

3. Download **Adobe XD** (free)

<https://www.adobe.com/sea/products/xd.html>