

Guide for Loading Models onto a HoloLens Using Unity

Step 1: Connect the Router

1. Plug the router into an electrical outlet.
2. Ensure the router powers on.
3. Connect both the computer running Unity and the HoloLens to the **HiveHoloLens** network.

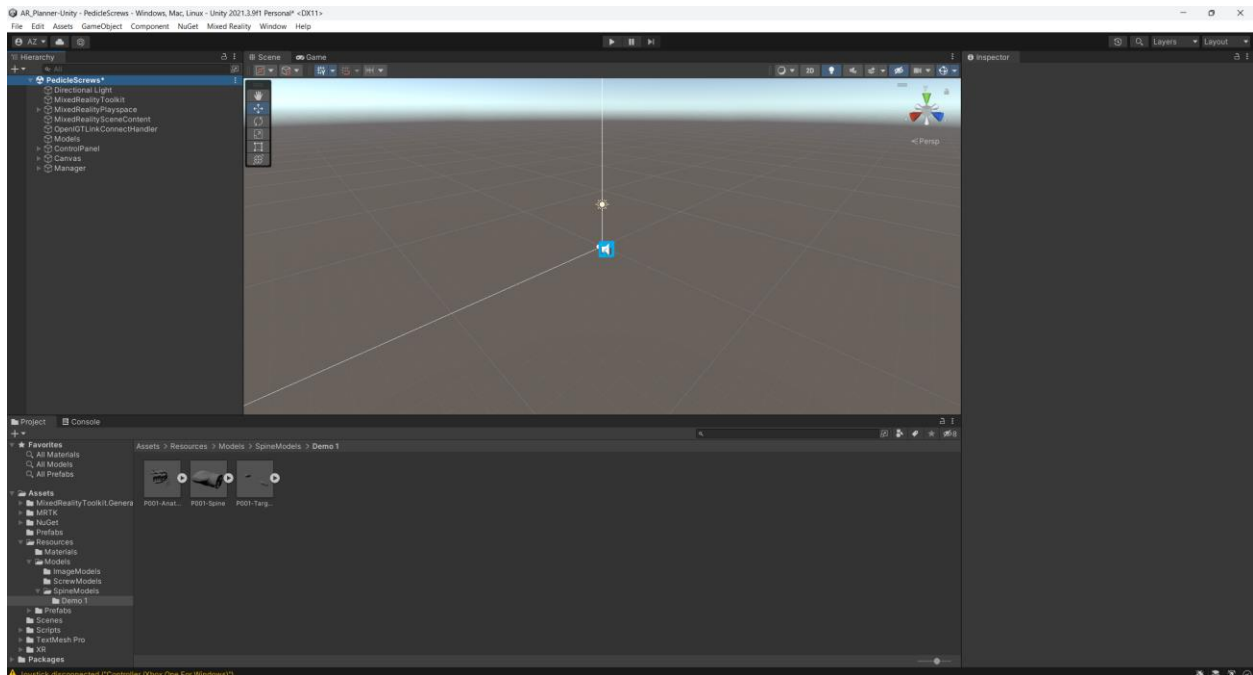
Step 2: Prepare the Model Files

1. Obtain the model file(s) from HIVE/Mauro.
2. Create a folder for the patient and place model file(s) into this folder.
3. Place the patient folder into the project's "SpineModels" folder.
 - The file path is relative to where the project is stored and should look like this:

.\HoloLens2and3DSlicer-PedicleScrewPlacementPlanning\AR_Planner-Unity\Assets\Resources\Models\SpineModels

Step 3: Open the Unity Project

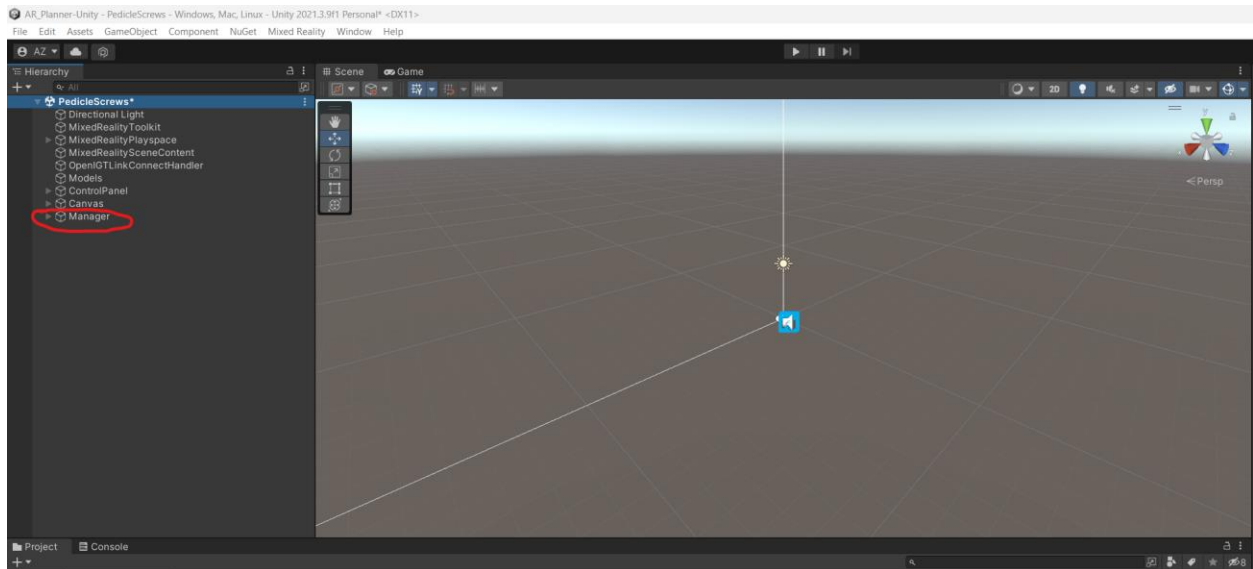
1. Open **Unity Hub**.
2. Select the **AR_Planner-Unity** project to open the project.



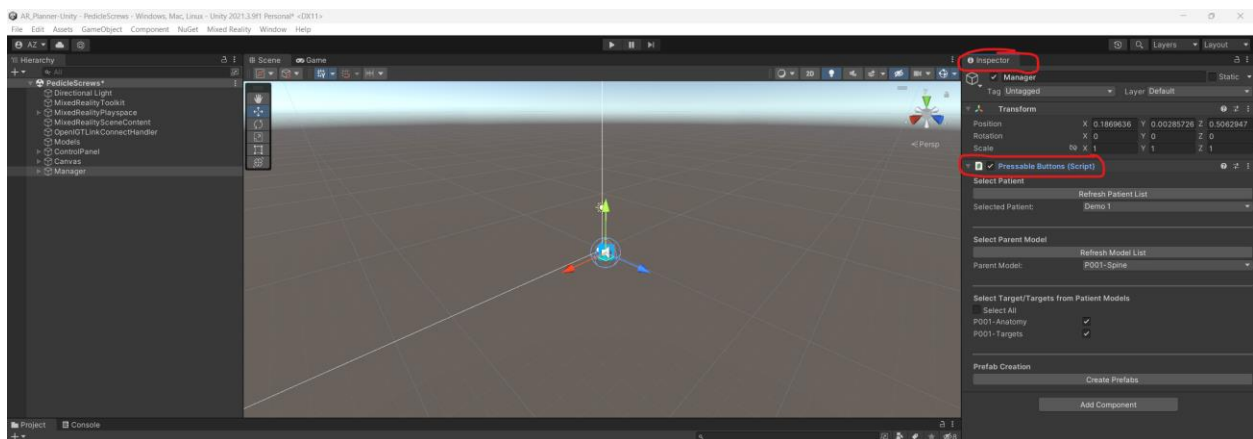
Screen Shot of the AR Project open in Unity

Step 4: Configure the Manager Object

1. In the **Hierarchy** window (located on left hand side), locate and select the **Manager** object.



2. In the **Inspector** window (right hand side), find the **Pressable Buttons** script/component, and expand the component via the dropdown button if it is not already expanded.



Step 5: Select the Patient

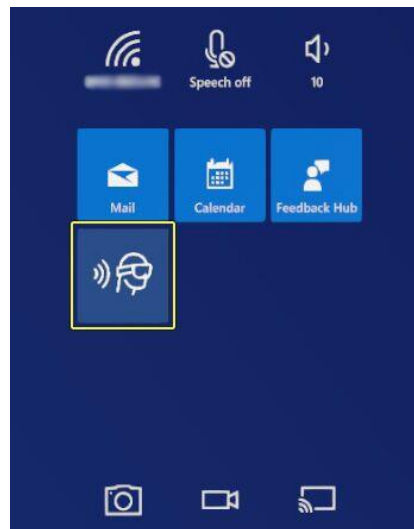
1. Within the **Pressable Buttons** component, click on **Refresh Patient List**.
2. Choose the target patient by selecting their file name from the refreshed patient list.

Step 6: Prepare the Patient Model

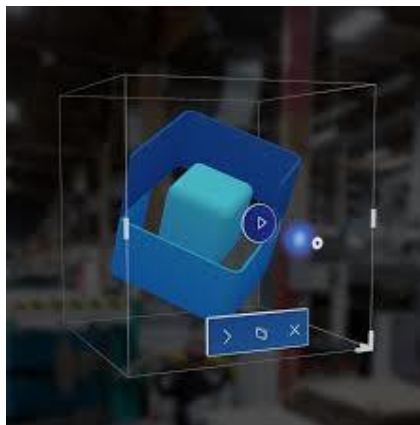
1. Identify the main model used for registration (typically the skin model for this use case).
2. Set this model as the parent model.
3. Check the box next to any model you want to appear opaque.
4. Click on **Create Prefab** to generate the prefab with the selected models and configurations.

Step 7: Prepare HoloLens for Holographic Remoting

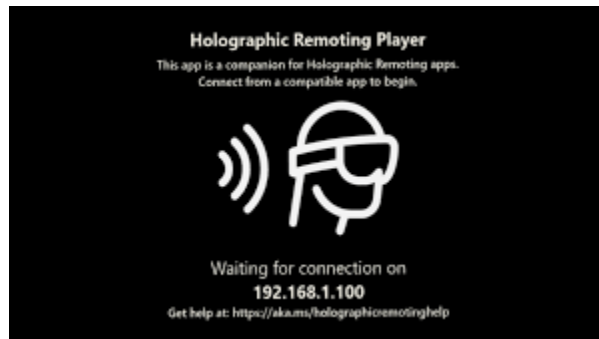
1. From the **Start/Home** menu, ensure that the HoloLens is connected to the **HiveHoloLens** network.



2. Select the **Holographic Remoting Player** app.
3. You should see a cube in front of you. Press through the center of the cube to launch the app. Note that the cube in the image below is for a different application but will look similar to the one you see.

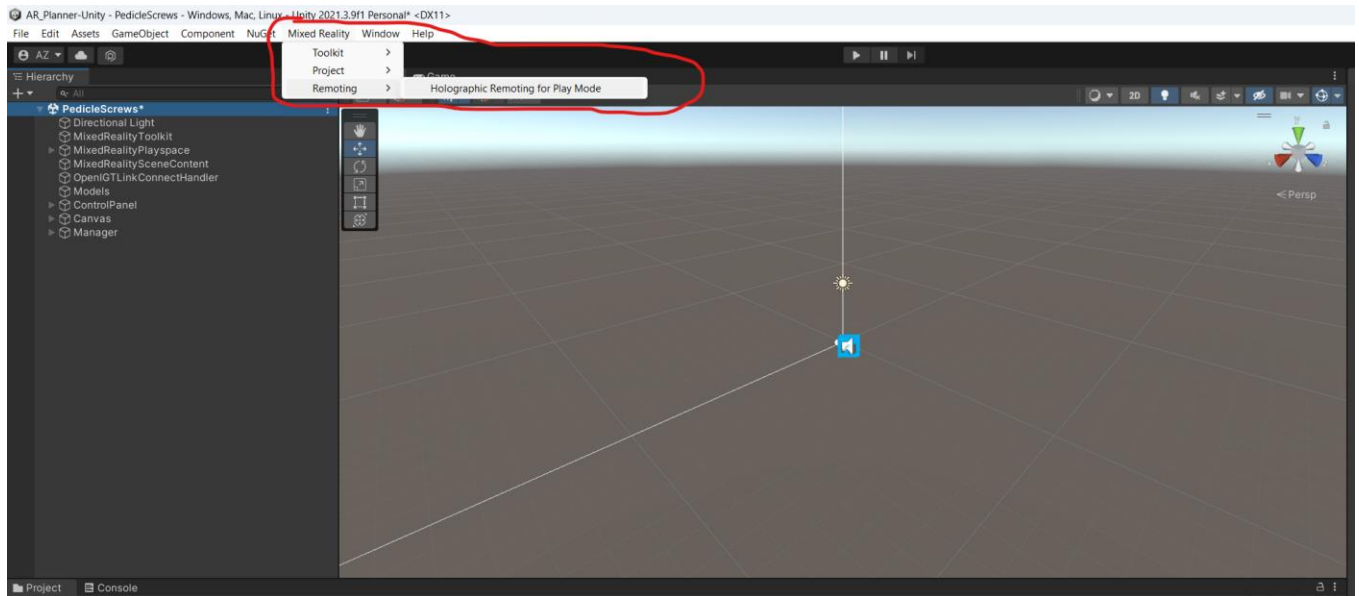


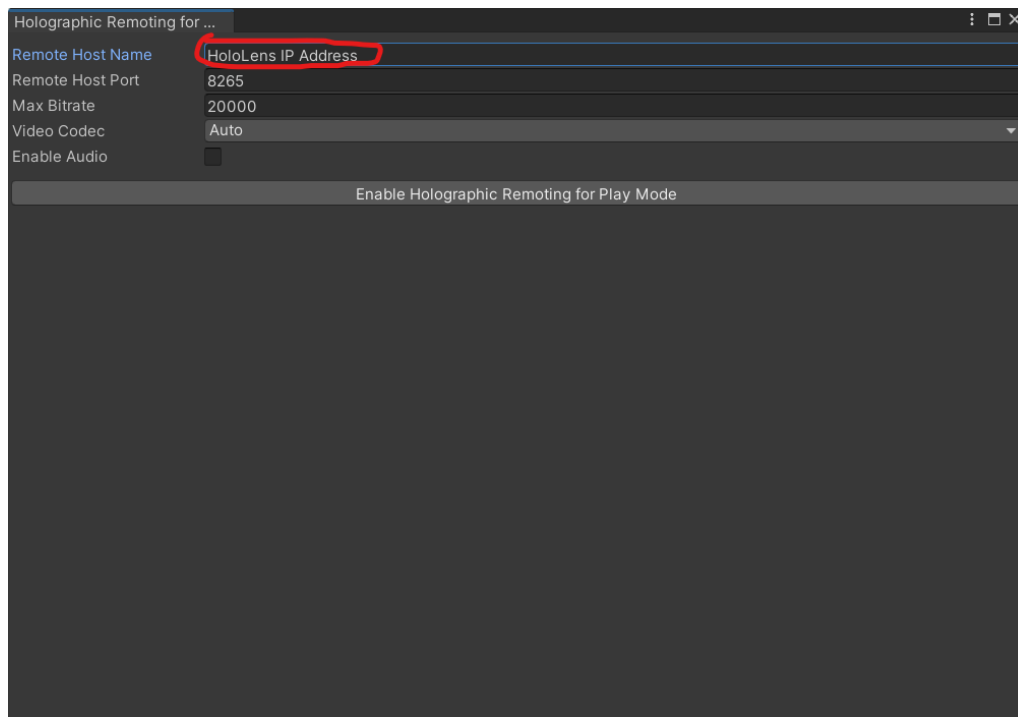
- Once the app is launched, a window displaying the headset's IP address will appear. Write down this IP address.



Step 8: Configure Unity for Holographic Remoting

- Select the **Mixed Reality** tab from the top toolbar.
- In the **Mixed Reality** menu, choose **Remoting**, then click on **Holographic Remoting for Play Mode**.





3. Enter the HoloLens' IP address in the **Remote Host Name** section.
4. Click **Enable Holographic Remoting for Play Mode** if it is not already enabled (the button will say **Disable** if remoting is already enabled), then close the remoting window.

Step 9: Start the Holographic Remoting Session

1. **Make sure that your computer is connected to the HiveHoloLens network!!!!**
2. In Unity, click **Play** to begin the holographic remoting session.

