Unity JigglePhysics

A relativistic squash-and-stretch jigglebone physics solution for characters in Unity.

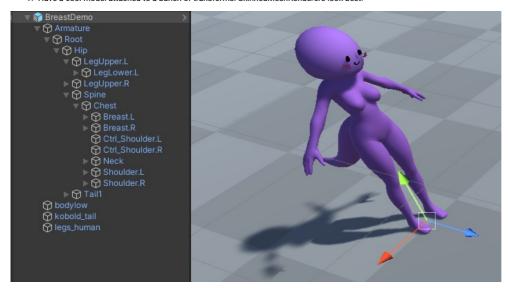
A video demo can be found on youtube.

Usage

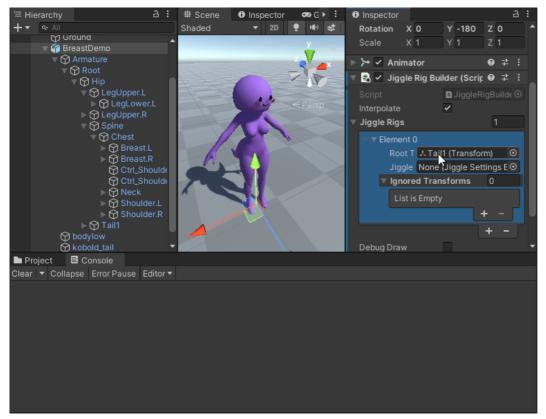
A scene full of examples can be found within the scene Demo.unity. If anything below doesn't make sense, try out the examples!

How to Jiggle a Rig

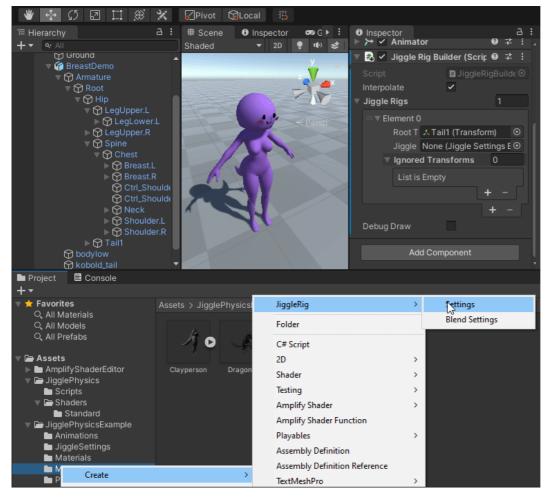
1. Have a cool model attached to a bunch of transforms. SkinnedMeshRenderers look best!



2. Create a JiggleRigBuilder Monobehaviour on the object, and select the root bones you want to jiggle by adding them to the list of JiggleRigs.



3. Create a JiggleSettings ScriptableObject in the project through the Create->JigglePhysics->Settings menu. Then make sure that each JiggleRig has a reference to a JiggleSetting.



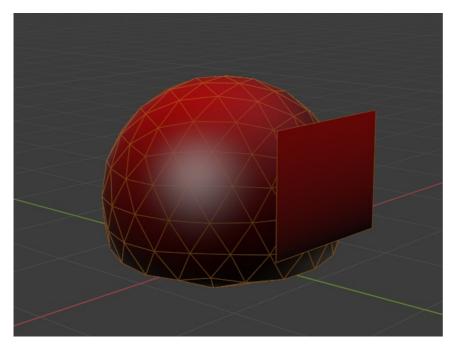
4. Play! You can adjust the jiggle settings during play mode and see changes live- And when you exit play mode, the settings should stick!

How to Jiggle a Skin (Advanced)

1. Have a cool skinned model, doesn't need very many transforms, but does need to be a SkinnedMeshRenderer.

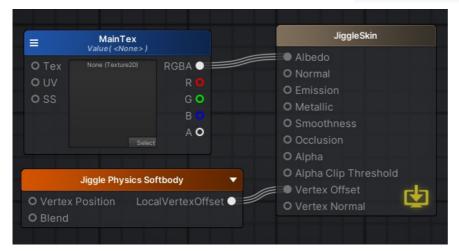


2. (Optional) Make sure the model has some sort of mask. By default the shaders use the Red vertex color channel to mask out the motion. I like to use Blender and Vertex Color Master for this.

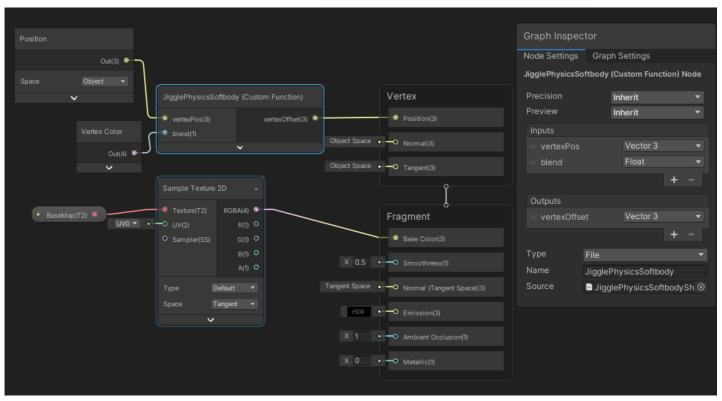


3. Create a JiggleSkin-supported shader with either Amplify Shader Editor, or Shader Graph for your specified shader pipeline.

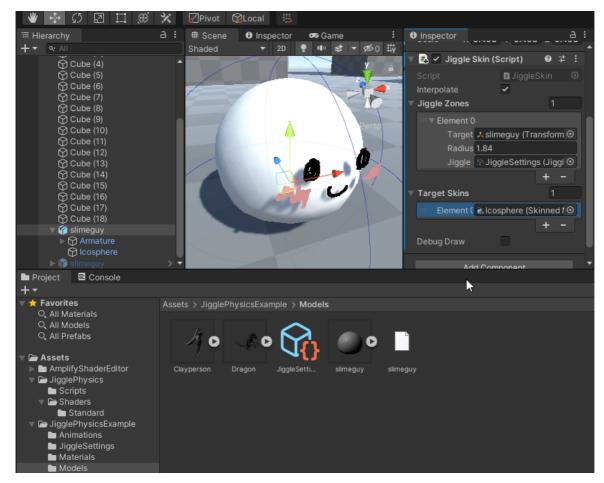
With ASE, there should be a custom node automatically added to your list of available nodes: Jiggle Physics Softbody.



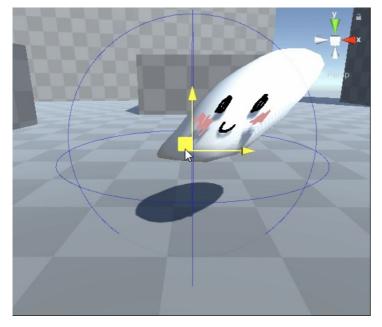
 $With Shader Graph, you must use a {\tt CustomFunction} \ node, and use the hlsl file found at {\tt JigglePhysics/Shaders/JigglePhysicsSoftbodyShaderGraph.hsl}.$



4. Add a JiggleSkin MonoBehavior to the object, and add the desired list of JiggleZones, with their specified JiggleSettings.



5. Ensure the target skins have a JiggleSkin-supported shader applied, then Play!



Need more help?

Check the asset store page on places to contact us! We'd love to help.