


# UniHumanoid

Unity humanoid  BVH 

## BVH runtime loader

```
var context = new BvhImporterContext();
context.Parse(path);
context.Load(); // create Skeleton hierarchy and mesh for visualize
GameObject root = context.Root;
```

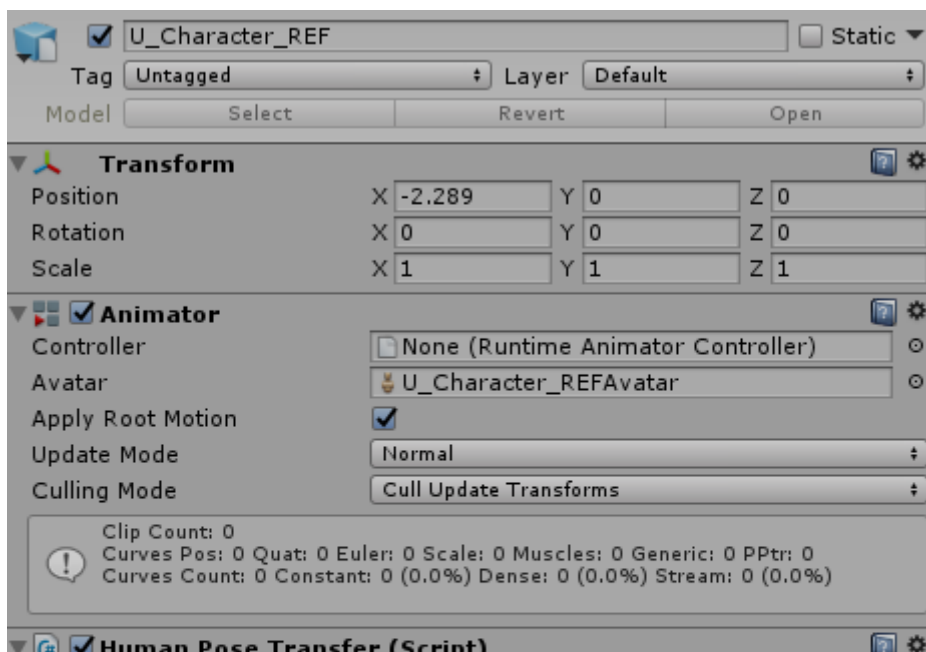
## RuntimeLoader

- Scenes/RuntimeBvhLoader.unity

## RuntimeLoader PoseTransfer

 BVH                      

- Scenes/PoseTransfer.unity



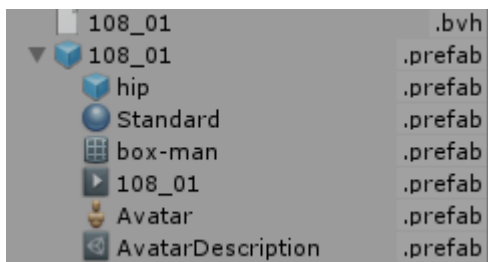


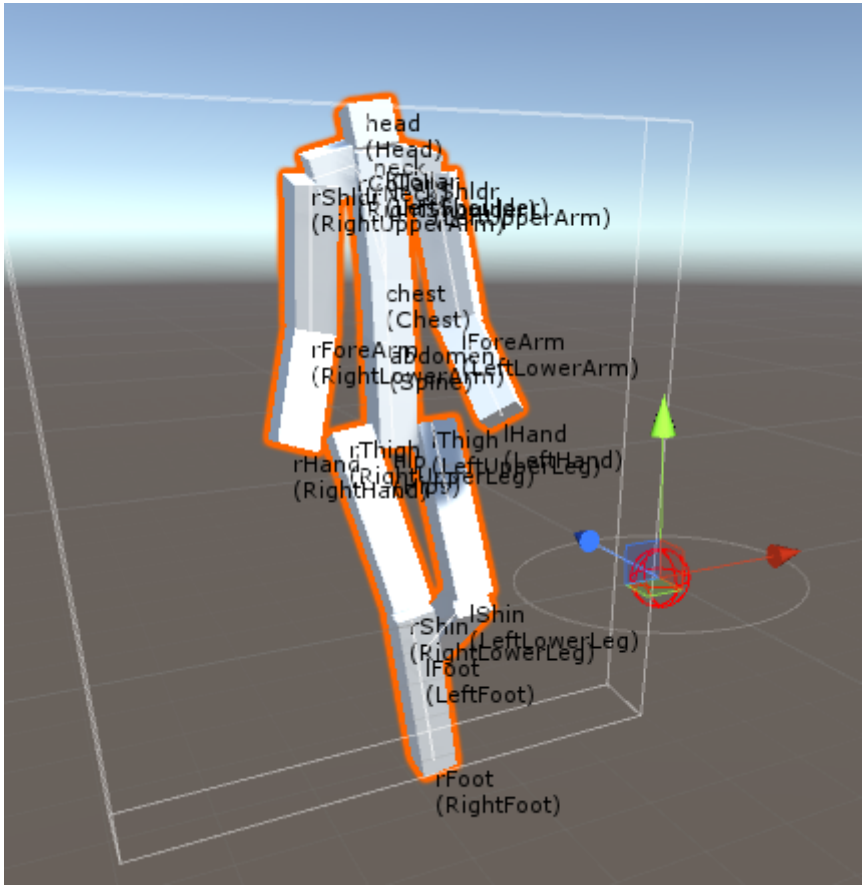
# BVH AnimationClip

Drop bvh file to Assets folder. Then, AssetPostprocessor import bvh file.

☐ BVH ☐ ☐ ☐ ☐ Asset Postprocessor ☐ BVH ☐

- `hierarchy()`
- `humanoid Avatar`
- `legacy AnimationClip`
- `preview()`





object .



script(GameObject hierarchy(human avatar Animator(

- 
- +Z
- Quaternion.identity
- hips bone

Guess bone mapping()

(), Ensure T-Pose avatar

**Bone Mapping (Script)**

Hips

hip

Guess bone mapping

Guess bones from hips

Ensure T-Pose

Arms to Horizontal

Create avatar

before create,  

1. Model root transform should reset(origin without rotation)  
2. Model forward to Z+(rotate child of model root)  
3. Required bones filled(todo)

Arm	Left		Right	
Shoulder	<div>lCollar</div>		<div>rCollar</div>	
UpperArm	<div>lShldr</div>		<div>rShldr</div>	
LowerArm	<div>lForeArm</div>		<div>rForeArm</div>	
Hand	<div>lHand</div>		<div>rHand</div>	

**Body**  
Spine

abdomen

  
Chest

chest

  
UpperChest

None (Game Object)

  
Neck

neck

  
Head

head

  
Jaw

None (Game Object)

  
Eye

None (Game

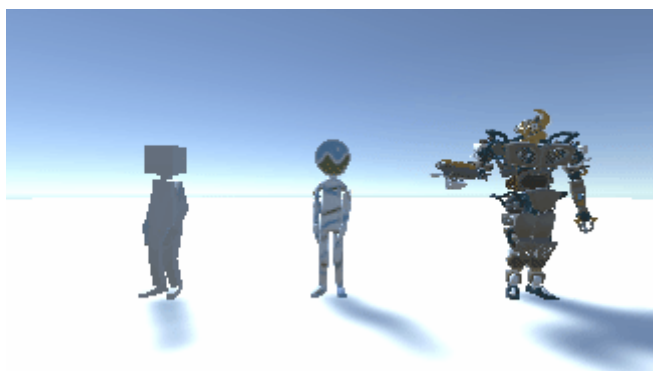
None (Game

Leg	Left		Right	
UpperLeg	<div>lThigh</div>		<div>rThigh</div>	
LowerLeg	<div>lShin</div>		<div>rShin</div>	
Foot	<div>lFoot</div>		<div>rFoot</div>	
Toes	<div>None (Game</div>		<div>None (Game</div>	

Hand  
Description

01\_01.description (AvatarDes

humanoid
 UniGLTF
 BoneMapping
 human avatar





- <https://sites.google.com/a/cgspeed.com/cgspeed/motion-capture>
- <http://mocapdata.com/>
- <http://www.thetrailerspark.com/download/Mocap/Packed/EYES-JAPAN/BVH/>

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Revision #4

Created 27 July 2024 07:05:44 by [ ] [ ] [ ] [ ]

Updated 16 September 2024 01:25:55 by [ ] [ ] [ ] [ ]