

COSC 490 Group Project - Morgan State Virtual Reality Avatar

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The deliverables of this project contain two 3D meshes that have been rigged for use in virtual reality environments such as VR Chat. One mesh is modeled to the likeness of a Morgan State Student in graduation ceremony regalia. The second mesh is modeled after Morgan State's mascot, Benny the Bear. The likeness of which these models are based are not owned by the creators, and therefore not for resale and only to be used within the bounds specified by the project. This includes the final presentation as defined by Dr. Paul Shuangbao Wang, and subsequent project submission for grading. Both of these models and textures were created using Blender, Unity, and Vroid Studio.

Features.

The following functionality is operational:

Two 3d Meshes contain:

- Fully articulating armatures
- Proper mesh deformation upon armature adjustment
- Unique Shading, Texturing, and attached materials

Package contains both Unity files and Blender files of each of the meshes

Set-Up:

In order to set up these models within VR Chat, you will need to have the up to date VRChat Creator Companion and appropriate Version of Unity/ Unity Hub installed which at the time of creation (5/1/2023), is Unity 2019.431f1. Create a new project within the creator companion SDK and once open, import either of the models' folders containing Unity Files: either Benny the Bear Unity, or Morgan Student Unity. These models have already been set up to run within Unity, so the next step is to sign into or create your VRChat account via the VRChat SDK tab (top middle: VRChat SDK > Show Control Panel). Models are currently unable to be uploaded by accounts that have not reached New User status (~24 hours in game time), so ensure the account you're using has that ability. Once sign in has been achieved, following the steps within the Builder tab will allow you to upload the model to your account library for access within the VR Chat Space.

To access either file in Blender, you will need up to date Blender 3d Modeling Software. Once Blender is installed, using the File tab, import either model using either the `Benn_the_bear_avatar.blend` or `Morgan State Student Blender.blend` file. These files will be set to operate within blender, for modeling, animation or can be transported to other softwares such as Unity, or Unreal.

Necessary Links:

VRChat Creator Companion Download:

<https://vrchat.com/home/download>

Current Unity Compatible Version (5/2/2023):

<https://unity.com/releases/editor/whats-new/2019.4.31>

Blender Download:

<https://www.blender.org/download/>

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