



Avatar Features

High Fidelity offers 3d character designers, artists and TD's unprecedented features to bring 3D characters to life!

Use Your Character in VR!

- Easily step into your character as an avatar
- Control your avatar's head and body using affordable 6dof HMD and hand controllers
- Optional full body support for even more precision control with up to five additional Vive trackers
- Full body tracking is easily calibrated in a matter of seconds
- High Fidelity intelligently mixes HMD and hand input with animation states for compound VR/animation blending for things like chairs which sit your lower body with animation but leave upper body & head to drive with controllers

Modeling & Texturing

- Create your avatars with standard 3d modeling tools, like Maya, Blender, Zbrush, etc
- High Fidelity has complete physically based rendering
- Use stunning PBR materials exported with tools like Substance Painter or Quixel.

Rig & Go!

- Rig your characters using a standard or custom skeleton, or tools like Mixamo Autorigger
- Support for facial blend shapes to create expressive custom facial animation
- Use High Fidelity Flow Bones to create chains of dynamic bones for realistic avatar soft body secondary animation
- Run your rigged character through our Unity Humanoid based avatar preparation & upload tool

Wearables & Avatar Entities

- Create wearable entities that can attach to your avatar, such as wings or hats, weapons or horns
- Avatar entities are fully functional and can have scripts, play animations, emit particles and sounds, even other entities
- Avatar entities can be rigged and configured with soft body physics for things like flowing capes
- Animate your avatar entities

Advanced Functionality

- Add fully functional EC5 Javascript functionality to your avatar to script effects and other interactions
- Scripts can access avatar attributes directly such as joints or materials
- Create animated and customizable materials using High Fidelity's material entity type
- Leverage GLSL shader language and raymarching on primitives to create out-of-this-world visual effects

Share, Host, Certify & Monetize

- You can share or distribute your creations as you see fit!
- Sell your creations on the High Fidelity Marketplace for HFC and turn it into real money!
- Upload your avatars to the High Fidelity marketplace or avatar hosting backend for free
- People can easily discover and buy avatars in the Marketplace (for free or sale)
- Declare and protect your creation with certification on the VRBA blockchain
- Customers can associate their certified avatar with their account so only they can wear them
- Easily recognize counterfeit or ripped models and avatars by inspecting their certificates
- Sell your avatars and other content from in-world showrooms that link to the Marketplace

Getting Your Characters into High Fidelity

If you've created rigged characters for games or animation, you'll find the workflow for getting them into High Fidelity to be relatively familiar.

Process & Upload your Avatar

After you've completed modeling, texturing and rigging your avatar, run it through the High Fidelity avatar plugin for Unity and follow the instructions. Once you're satisfied that the avatar is correctly configured in Humanoid, you can run the Unity tool exporter to create and upload the processed avatar model and its metadata file (ending in .fst). The .fst file contains all the information HiFi needs to load, animate and render the avatar.

I've made and uploaded an avatar - now what?

You can bookmark your avatar, create or buy wearable accessories for it, add avatar scripts, flow bones, custom materials, you can put it on the Marketplace for sale, or perhaps put it in a public room with a "Wear me" typescript.

