\*deshines your nikki\*

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#### a workflow for retexturing hair models using vanilla assets

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### **System**

All screenshots in this guide were taken in Blender 4.2.

### **Prerequisites**

The technique is easy if you already get how hairs work, but this guide does not teach you hair mashup/port basics. This guide assumes you know all this stuff already:

- Importing and exporting using Textools
- Texture/material assignment in Textools
- Identifying/troubleshooting texture issues
- Blender edit mode and sculpt mode
- Blender armature modifiers
- Weighting a hair
- Basically, how to make a port or a mashup.

#### FAQ

Q: Couldn't you just use a hair card? This is dumb and time consuming.

**A:** Yes, and that would be 100 times easier. I almost exclusively use vanilla mashups, so I personally don't like how most of the existing hair cards look on my characters. With hair cards you can just swap the textures in tt/penum and not have to open Blender at all. If you make one, lmk and I'll link it here!

**Q:** Can I do this with gear?

A: Hell yeah. You can do a lot in UV Editing. I retexture stuff in my mashups all the time.

Q: I did all of this and it still looks like a Nikki hair :(???

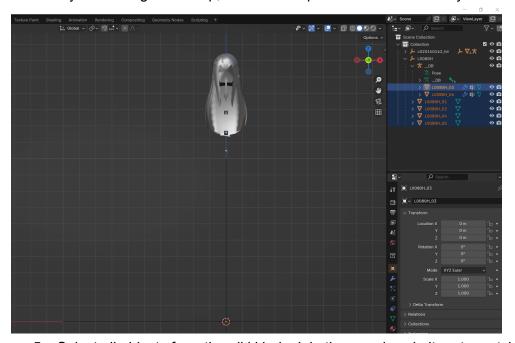
**A:** It is still a Nikki hair. It will not be perfectly vanilla-style. These hairs are modeled differently than vanilla hairs. I like to do mashups with these to make them fit better.

## Part 1: Setting Up

- Identify which vanilla hair's textures you want to use. You want the textures to have long, straight sections at a 90\* or 45\* angle. Newer is generally better. We'll use Hair 162.
   I've used various hairs, from new hrothgar hairs to venat's. Experiment and try options before you commit!
- 2. Export that hair to .fbx.
- 3. Open Blender and create a new project. Import the vanilla hair.

  There's probably a fine way to do this just using textures, but I'm lazy and this works ••
- 4. Import the hair you want to retexture. We'll assume you're using one of <u>sunrotea's Shining Nikki hair rips</u>. (You can do this with most models that use a haircard resource. Some steps will be different, but the principle will be the same.)

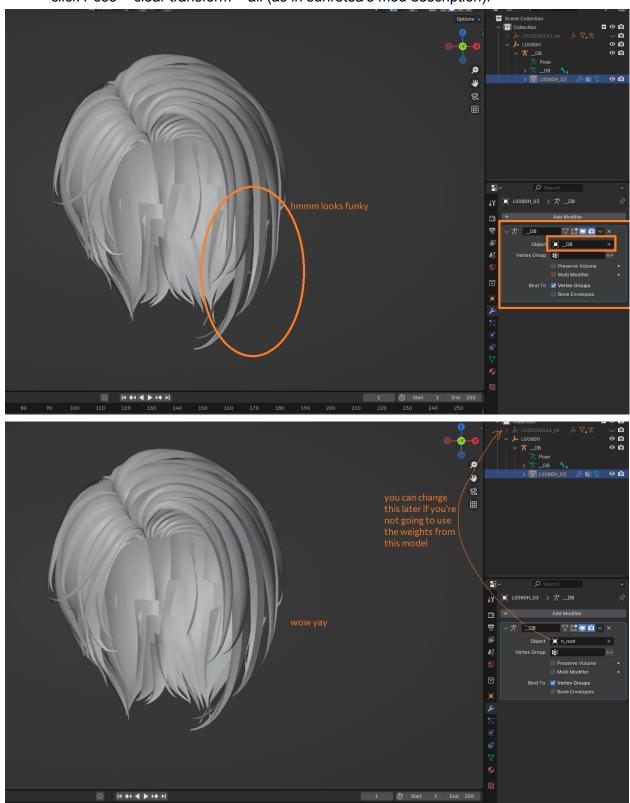
  If you're using a Nikki rip, it will show up so small it's effectively invisible, like this.



5. Select all objects from the nikki hair. Join them and scale it up to match the vanilla hair. Hide the vanilla hair once you're done.

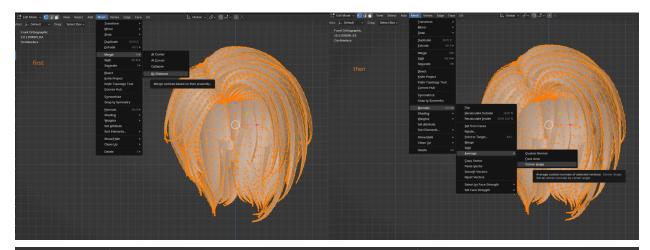


6. Check to see the model has any transforms applied. You can remove them by setting the Armature modifier to the ffxiv n\_root you intend to use, or just go to the top left menu and click Pose > clear transform > all (as in sunrotea's mod description).



7. Select all, then merge verts on the Nikki hair and set normals by corner angle. Fiddle around with this to see what looks best to you personally.

Personal preference alert! I do this because I think it results in more vanilla-like hairs. You can skip it. The major pros are less verts, of course, but also a slightly more vanilla-like end result thanks to less sharp edges. However, this can sometimes cause issues by creating new backfaces that your material will hide, esp on long/intricate hairs. Be mindful of face direction.



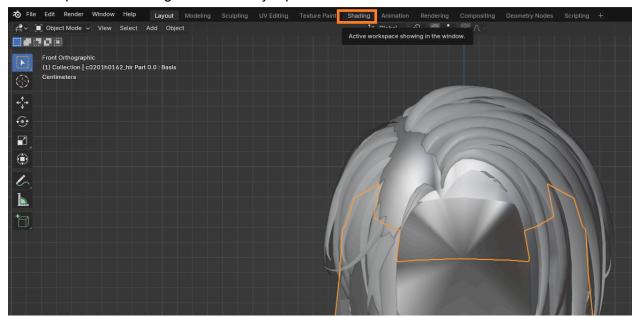


Yay, you have a functional Nikki hair ready to be retextured!

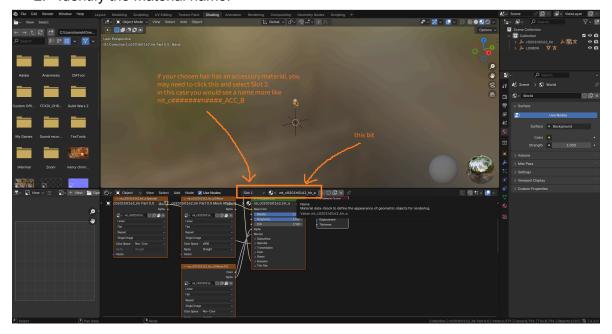
## Part 2: So What's Up With UV Editing

Now we have a Nikki model without textures, and a vanilla hair straight from ingame. First, we need to identify which material your vanilla hair is using. If you're following along, you'll have only one material, so it will be obvious. But since I use these in mashups and expect some of you will want to do the same, I'm including a how-to for checking without tabbing out to Textools.

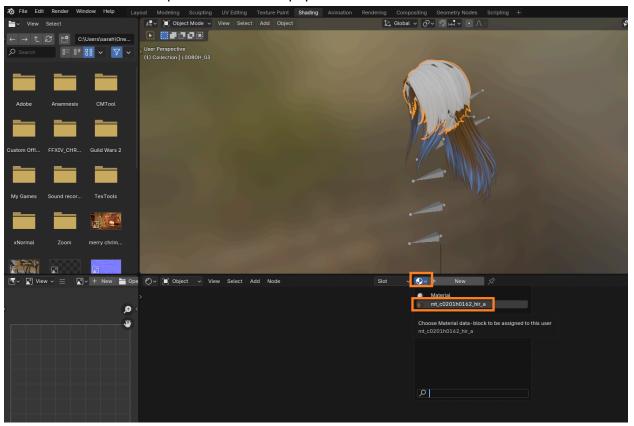
Unhide your vanilla hair and click on it in Object Mode.
 Open the Shading tab at the very top of the Blender UI.



2. Identify the material name.



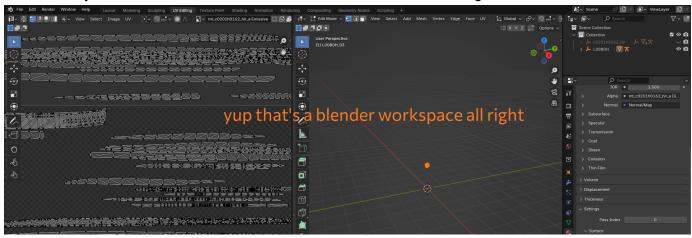
3. Zoom in and select your Nikki hair. It shouldn't have a material assigned yet. Click the Material globe icon in the center of the screen and select the vanilla hair material in the drop-down menu that populates.



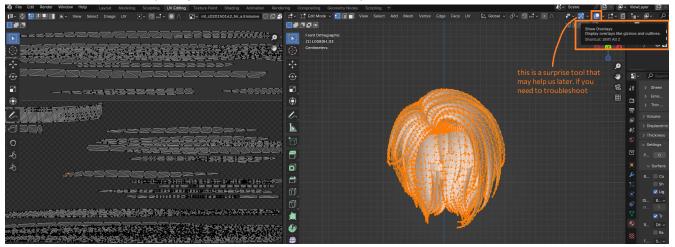
If it looks mostly transparent and very weird, you did it right.



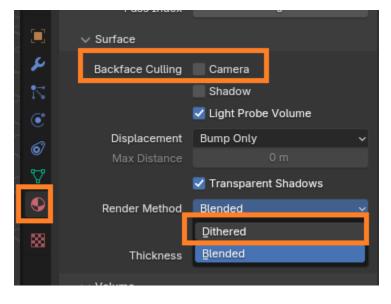
4. Hide your vanilla hair. Select the Nikki hair and click the UV Editing tab. It will look weird.



5. Get your workspace set up how you like it. I like to zoom in and turn the hair to face me, then select everything and turn off Show Overlays so I can see.



I also check my vanilla material to make sure it displays the same in Blender as ingame.

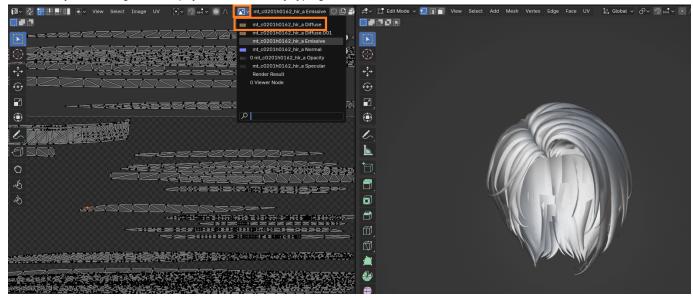


I usually leave Backface Culling off so that I can see what I'm doing, and I set the Render Method to Dithered. Sometimes I turn Backface Culling on to check how it would look, since that's generally enabled ingame.

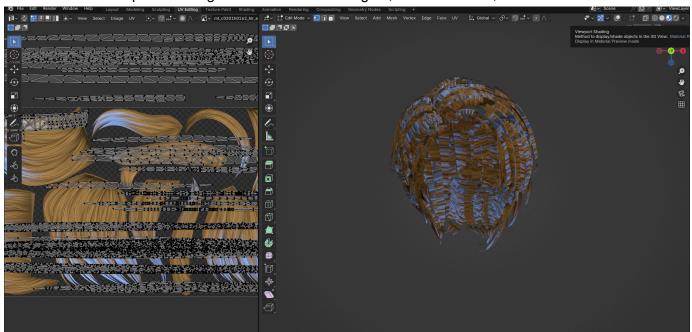
**Note:** This is Blender 4.2. These settings are very different in 3.X.

6. Go to the left viewport and click the dropdown with the little image on it. Select the diffuse texture - it's easiest to see from.

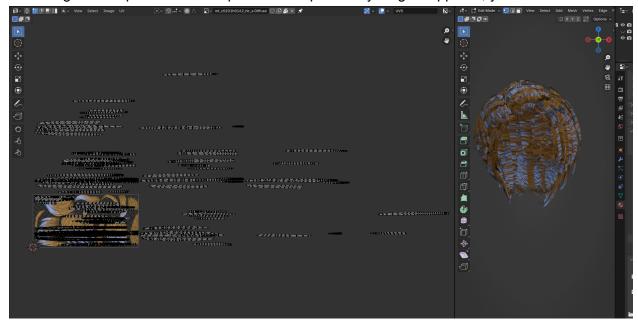
If you're doing a mashup, you can search by typing in the numbers, i.e. 162 for hair 162.



7. Set the Viewport Shading to Material Preview. Again, if it looks weird, it's correct.



8. Leave the model alone and focus on the left workspace. Zoom out and adjust so that you can see all of the polys. Note that you have to keep the entire model selected in the right workspace for the maps to show up. If everything disappears, you need to reselect.

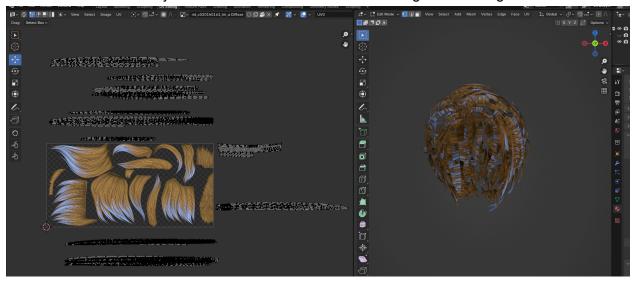


9. That's a mess, right? You want to simplify the UV mapping a bit so that you don't have to retexture each strand one by one. I accomplish this by selecting one 'bundle' at a time and layering it over other polys of the same-ish shape.

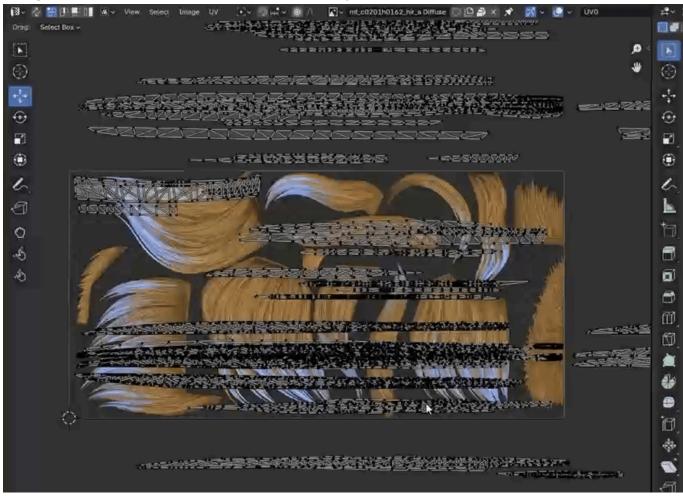
#### Tips and tricks:

- Remove all the shapes from over the top of the texture. You'll need to see there.
- Some hairs are a lot worse to work with than others and have one hair strand in multiple pieces. Merging verts earlier helps with this, but doesn't totally remove it as an issue. You are likely to find bits you missed later don't worry much now. Proportional editing and Select All Linked (Ctrl+L) help to catch all of the verts.
- You don't have to be exact at all. Try to get all the verts in a group, sure, but worry about finetuning later!!

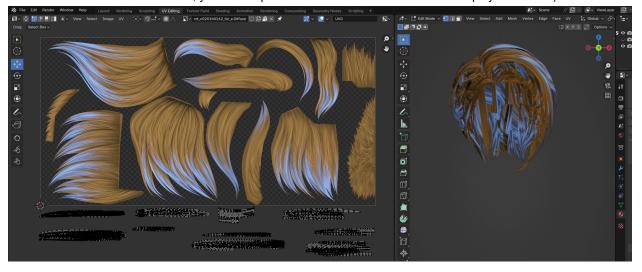
**TL:DR:** Click and drag in the left viewport to select one group, then move it on top of somewhat matchy ones with the Move tool. You should get something like this.



#### Mini gif explanation of Step 9: This, but repeat a bajillion times



10. Adjust the UV map groups to better fit the hairs of your vanilla texture. For sure make them much shorter! (We don't have to do this with Hair 162, but if you use a vanilla material where the textures are *not* horizontal, you should press A to select all and then rotate the polys to match.)

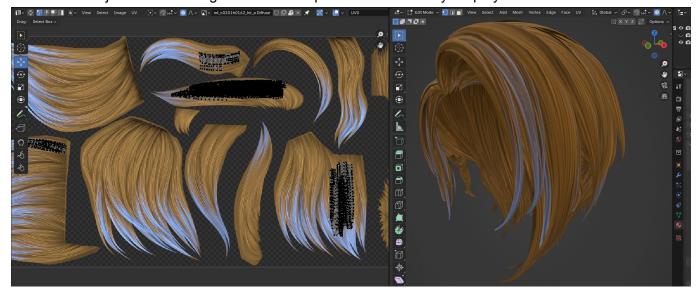


- 11. Start grabbing your groups and moving them on top of the vanilla textures.
  - Tips and tricks:
  - This takes forever to do neatly. It just does. The main thing that sped me up was practice, but not by much.
  - Use transparency to mimic FFXIV vanilla hairs for example, you can fade out the ends. (See next page.)
  - You'll need to adjust so that the UVs match the textures to avoid crunchiness.

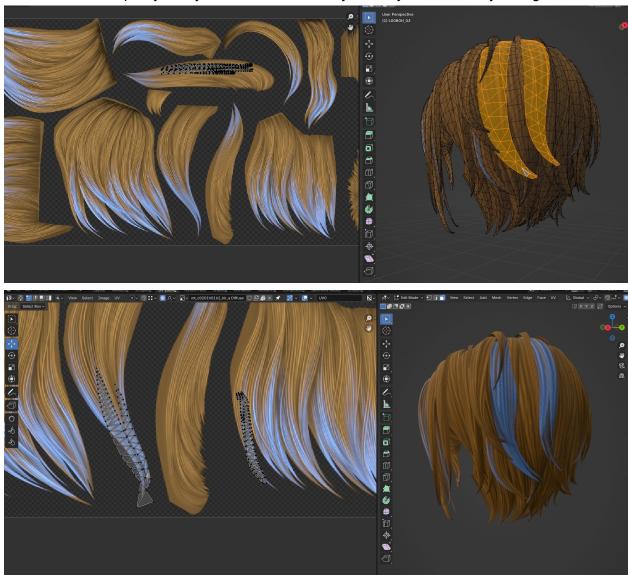
    Proportional Editing with move/rotate will be your best friend. Grab and Pinch tools are really helpful too.
  - I often end up with the vast majority of my groups on the same bit of the texture. This can help with speed.



12. Finetune by selecting strands on the model in the right viewport using Select All Linked, then adjust in UV Editing in the left viewport. Check carefully for polys that don't match.



You can adjust to get the textbook transparent ends that make FFXIV hair look like FFXIV hair pretty easily, albeit it turns out very crunchy. I like crunchy, though!



- 13. You're done retexturing! Now just check your face orientations, delete the vanilla hair pieces, and fit & weight the hair. (Other guides cover that so I'm not going into detail!)
- 14. If the hair doesn't look vanilla-style enough for you, consider doing a mashup to add layers and texture. The process for this is the same as any other vanilla mashup!

## **Troubleshooting Tips**

- If some parts of your finished hair are black or not dyeing correctly, try clearing the vertex color and alpha using Textools. (Edit Model -> Modify Mesh [or Part] Vertices -> Clear Vertex Color \_)
- Weighting these with data transfer only is possible but doesn't look great ime. If you're new to weighting hairs, remember to delete the Nikki weights. Also, *at least* consider going into j\_kao to blur / smooth stuff out, then hit Normalize All. You'll need to confirm all vert groups look good, too.

## You'll end up with something like this.

