

## John Laurence Mislang - 3D Modelling

### Process

My concept for this project was to represent myself as a person and what my hobbies are. I'm a pretty big fan of gaming and anime, and I have earned a lot of achievements in that hobby. This is mainly because I tend to be pretty competitive, stubborn, and dare I say a little bit of a perfectionist, which sometimes works in my favor but causes me a lot of stress at the same time. This not only applies to my hobbies but also outside it as it is one of the main reasons I have a fairly high GPA from all the courses I took so far (despite not being a fan of studying, which I really don't like). However, growing up I feel like my passion for these things is gradually fading away and just see them as something to pass time on as I started worrying about adult stuff.

Going back to the main topic, I first imported my project 1 and 2 models in a new project file and added a floor, walls, and some lighting and did some smoothing to my controller model using sculpting tools. I then decided to apply separate textures for the skin, clothes, and the armor of my character model, and just to test things out, I applied a quick texture to the armor and quick shaders to the skin to see how things would look.

I then started UV mapping, and since I want separate textures for the different parts of my character model mentioned above, I created different separate shells for each of those parts and unfolding to prevent stretching. After creating different shells, and using a checker map to check for any stretching, I then set the texel density about the same for each shell before clicking the 'layout' command to shrink them all and fit them inside a 1 by 1 UV map, then I had to manually arrange them in a symmetric manner inside it.

I then tried different textures to each part of my character model to find one I like the most and fit my concept. After I found one, I quickly added the maps provided from those textures such as roughness, bumps, and displacements, and moved the textures around in the

hypershade (rotating textures, adjusting repeat UV, scale of the displacement map). After I am happy with the main body, I did the same process with the hair.

As for the eyes, I decided to not put on textures as it's very little and will be very unnoticeable as it blends with the face in not a good way, so I just put some shaders. I played around with the colors, transmission, and emission settings as I want them to be glowing a little.

After the body, I then moved on to the controller. I wanted it to represent my hobbies mentioned above so I decided to make the body gold and the button similar to that of blood. I played around a bit for it to match the current background and lighting setup that I had at the time. I also changed the floor surface to Ai Shadow Matte for it to blend in my background and replaced my walls with a skydome light and pasted a quick HDRI there for testing.

I then put up a main camera for rendering and adjusted its settings such as angle of view, focal length, depth of field in Arnold, focus distance to match the distance of the camera, and a little bit of aperture size. I then fixed the helmet texture and UV map it to have a proper texture that is the same as the characters armor.

After the models are done, I decided to focus more on my concept next. I duplicated the head of my model's body, filled the hole and adjusted its UV mapping, and duplicated that head to create 3 heads in order to represent my 3 attributes mentioned at the very beginning. I put different hair and eye color to each head for a little bit of distinction, but all of them are looking at the golden controller. I also decided to put 2 hands models from Maya reaching for the controller, and shaded them to be translucent to represent the fading of passion. Then I started looking for a fitting HDRI background and adjusted the area lights and skydome lights for shadows and to have a natural feel to my render. I then adjusted the camera settings (HD\_1080, Camera(AA) to 6) and turned on the Denoiser Oidn for my final render.

There was nothing particularly challenging in this project except for a few technical difficulties which I eventually solved. Such difficulties involved displacement maps in which the map nodes were missing in the hypershade and texture not showing in the helmet, both of which I received help from the TA to solve.

- ❖ File location of my texture folder when used in maya is

C:\Users\TEMP\Downloads\Textures (basically in my Downloads)

## Works Cited

Kumar, Amal. "Rusty Metal Grid Texture." *Poly Haven*, Oct. 2024,

[polyhaven.com/a/rusty\\_metal\\_grid](https://polyhaven.com/a/rusty_metal_grid). Accessed 27 Nov. 2024.

Tuytel, Rob. "Fabric Pattern 07 Texture." *Poly Haven*, 2020,

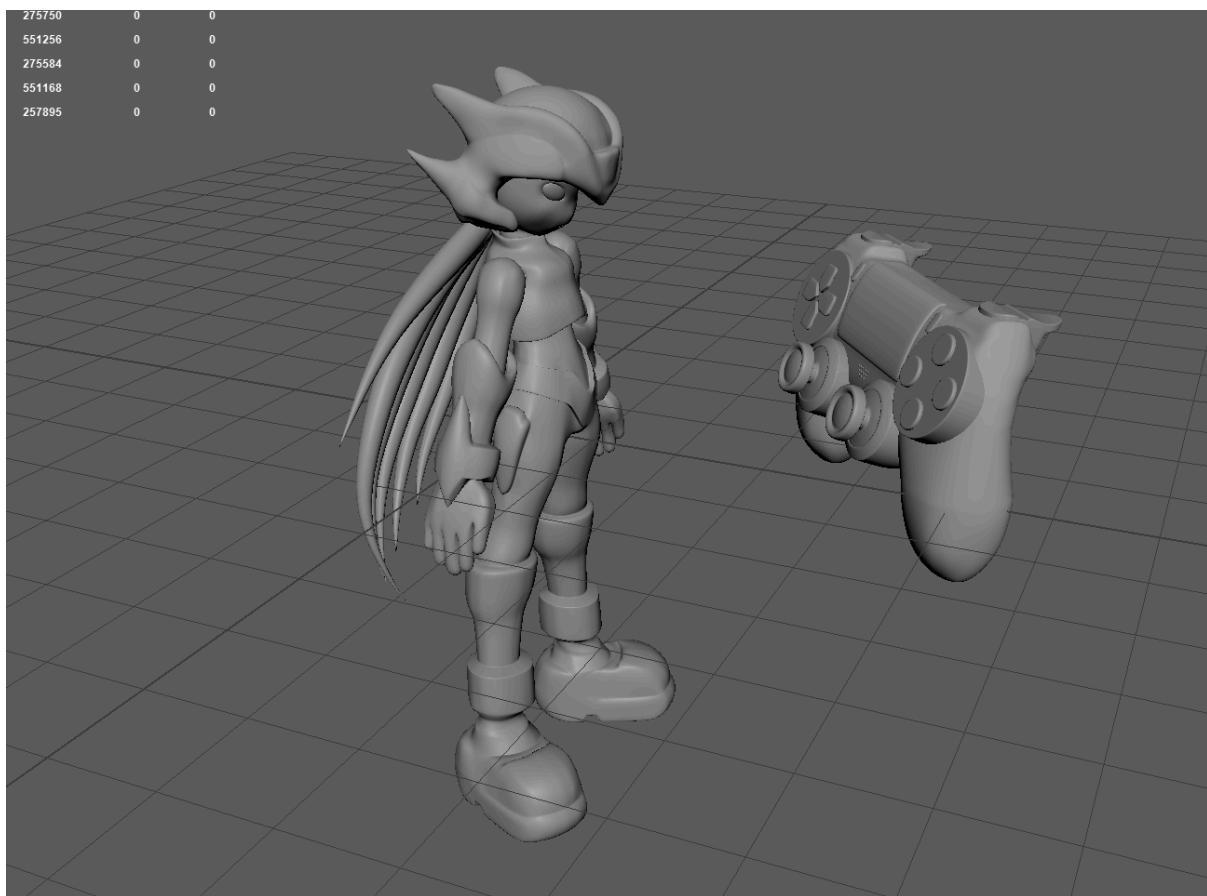
[polyhaven.com/a/fabric\\_pattern\\_07](https://polyhaven.com/a/fabric_pattern_07). Accessed 27 Nov. 2024.

Tuytel, Rob. "Rough Block Wall Texture." *Poly Haven*, 2019,

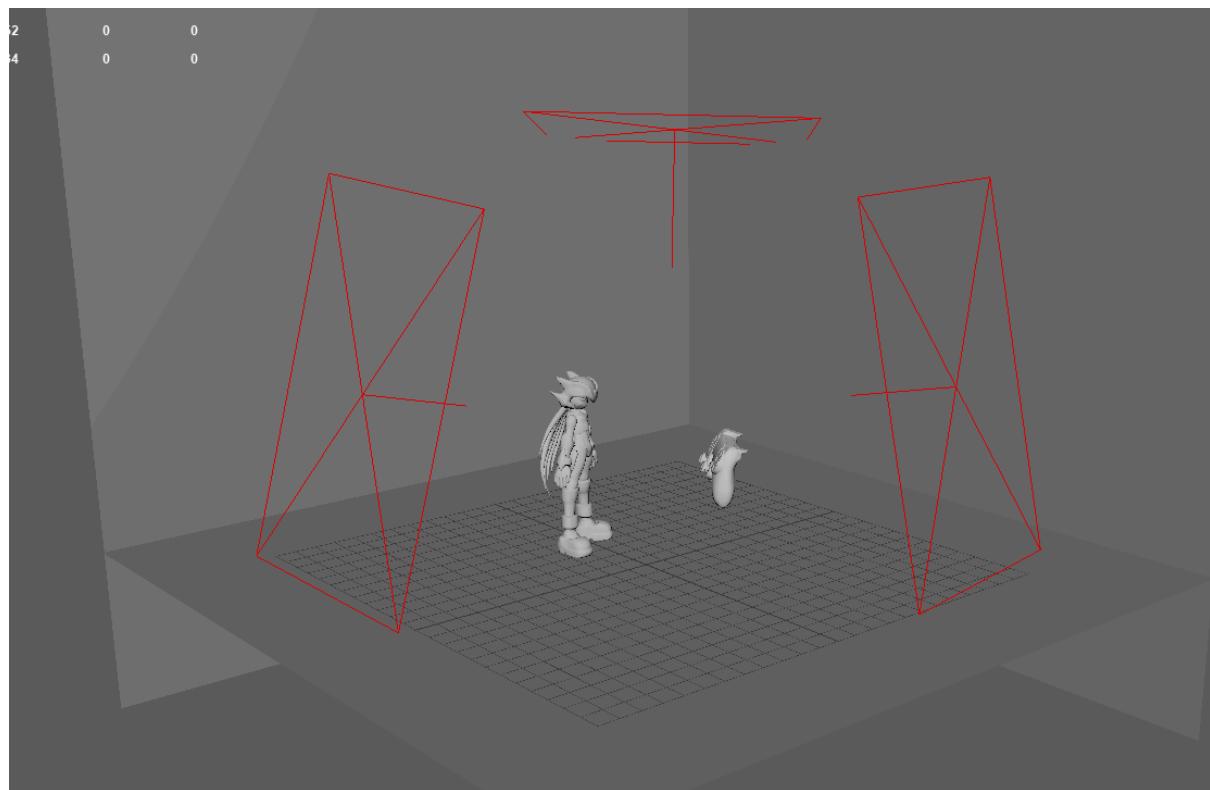
[polyhaven.com/a/rough\\_block\\_wall](https://polyhaven.com/a/rough_block_wall). Accessed 28 Nov. 2024.

Zaal, Greg. "Rogland Moonlit Night HDRI." *Poly Haven*, Oct. 2024,

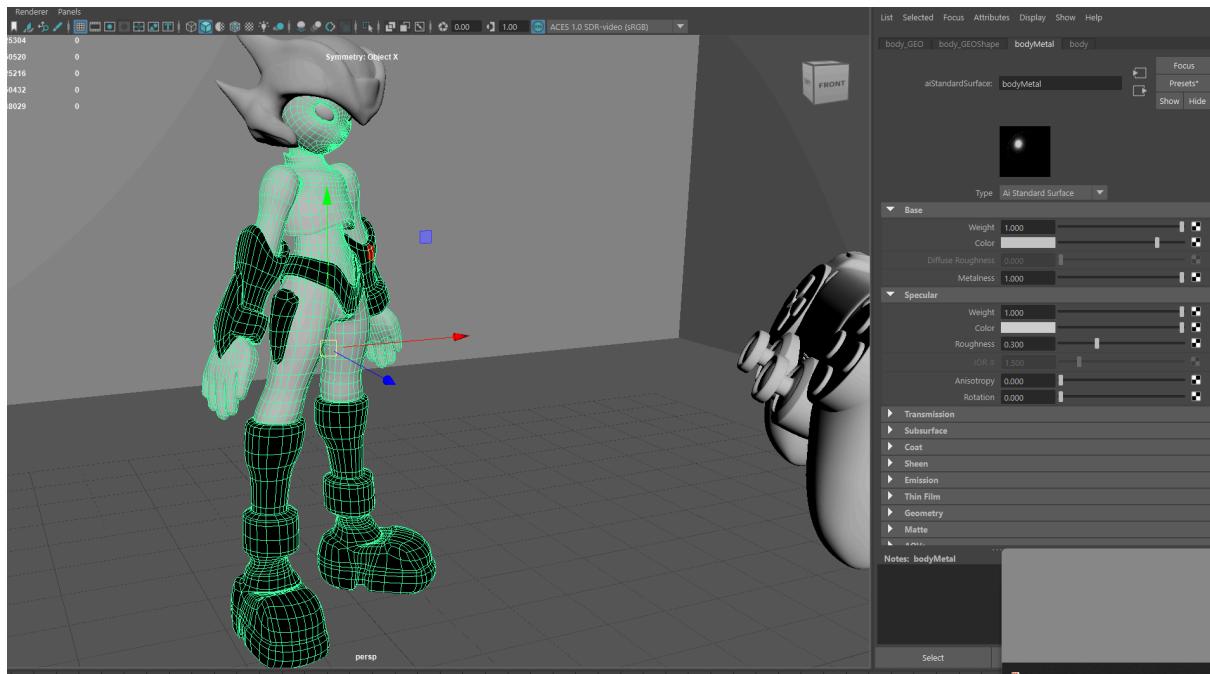
[polyhaven.com/a/rogland\\_moonlit\\_night](https://polyhaven.com/a/rogland_moonlit_night). Accessed 28 Nov. 2024.



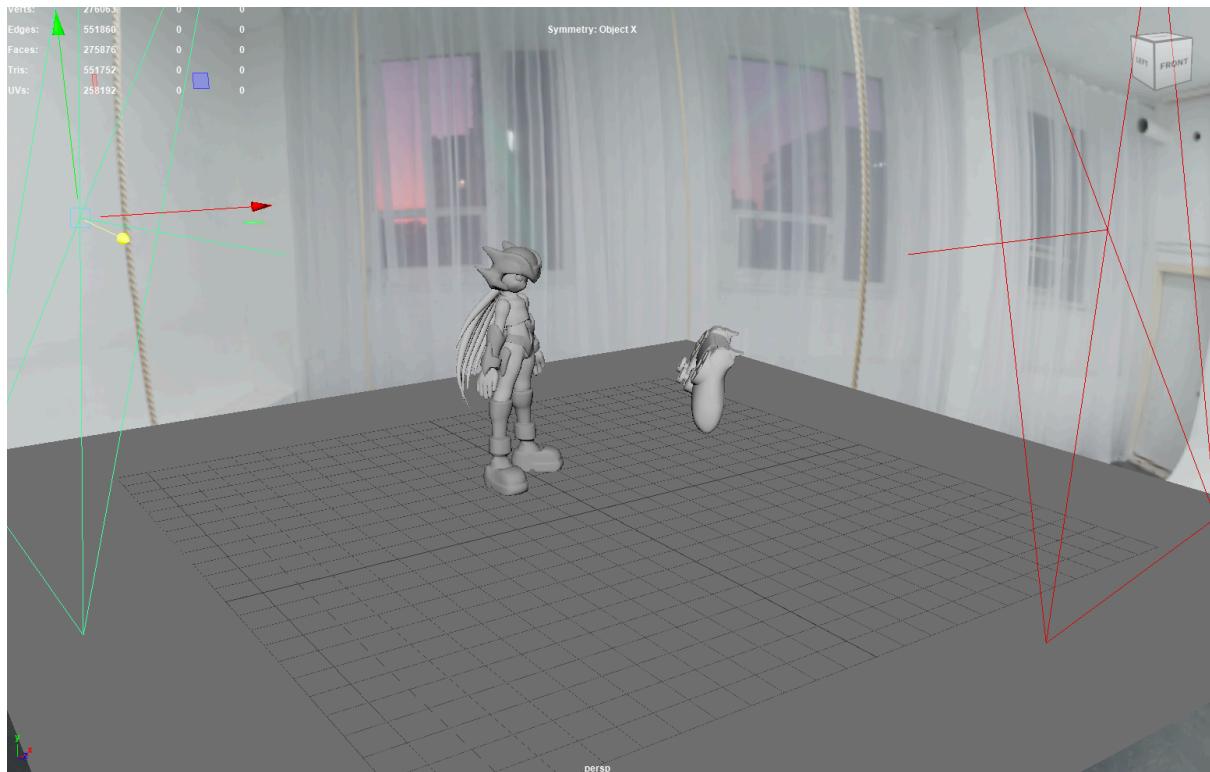
- Import



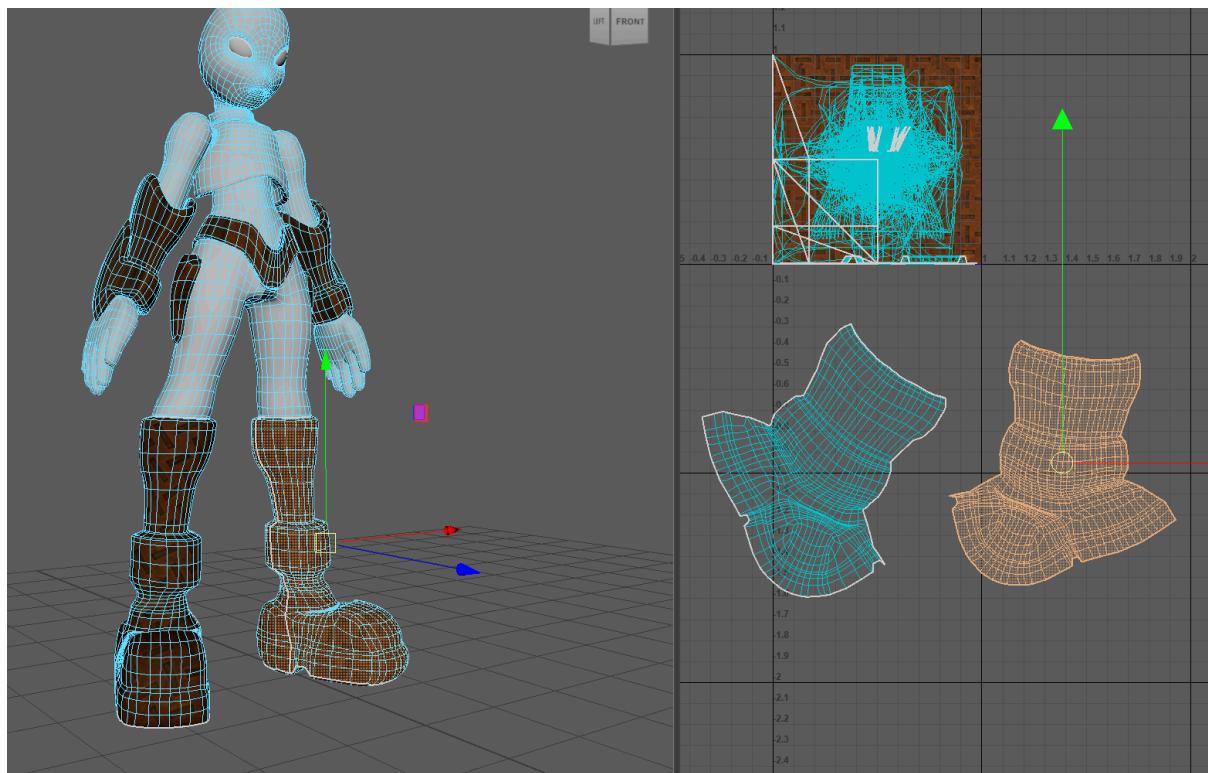
- Set up the room and some lighting



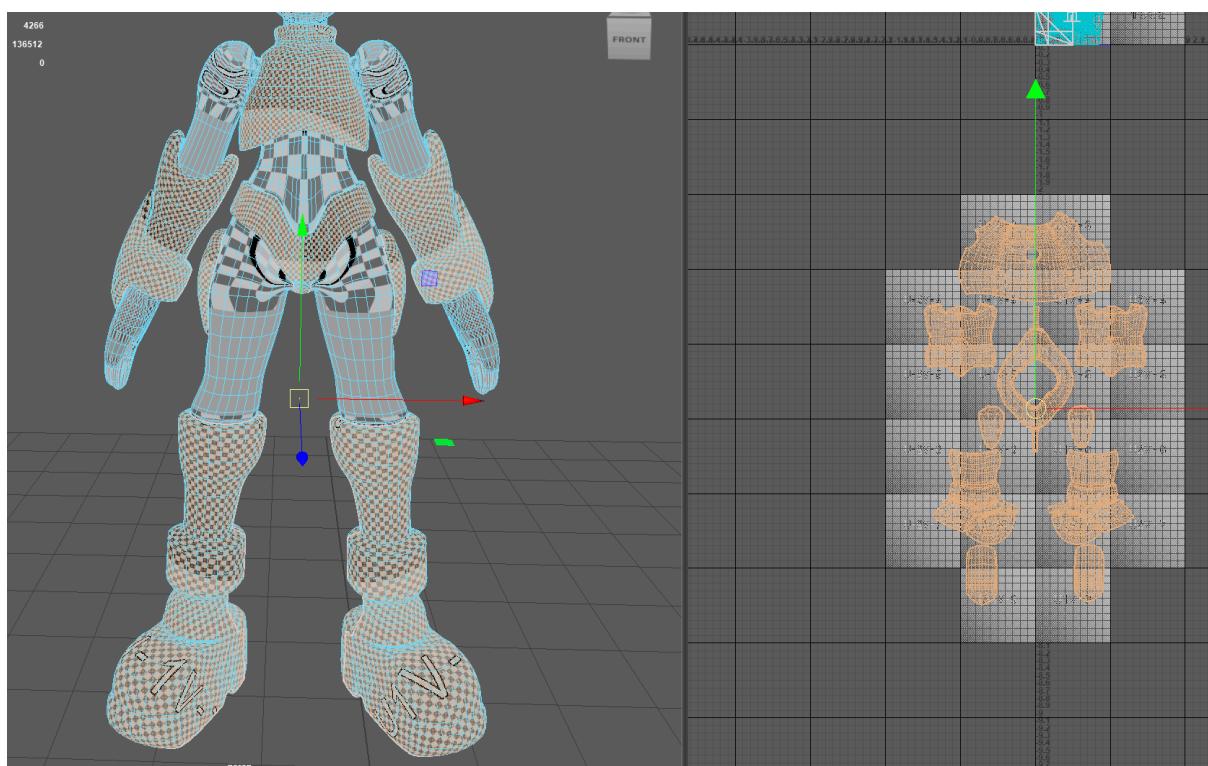
- Assigned different surface settings for the metal parts of the body and the helmet (base, specular)
- Also assigned different surface settings for the skin and the hair (preset skin, specular)



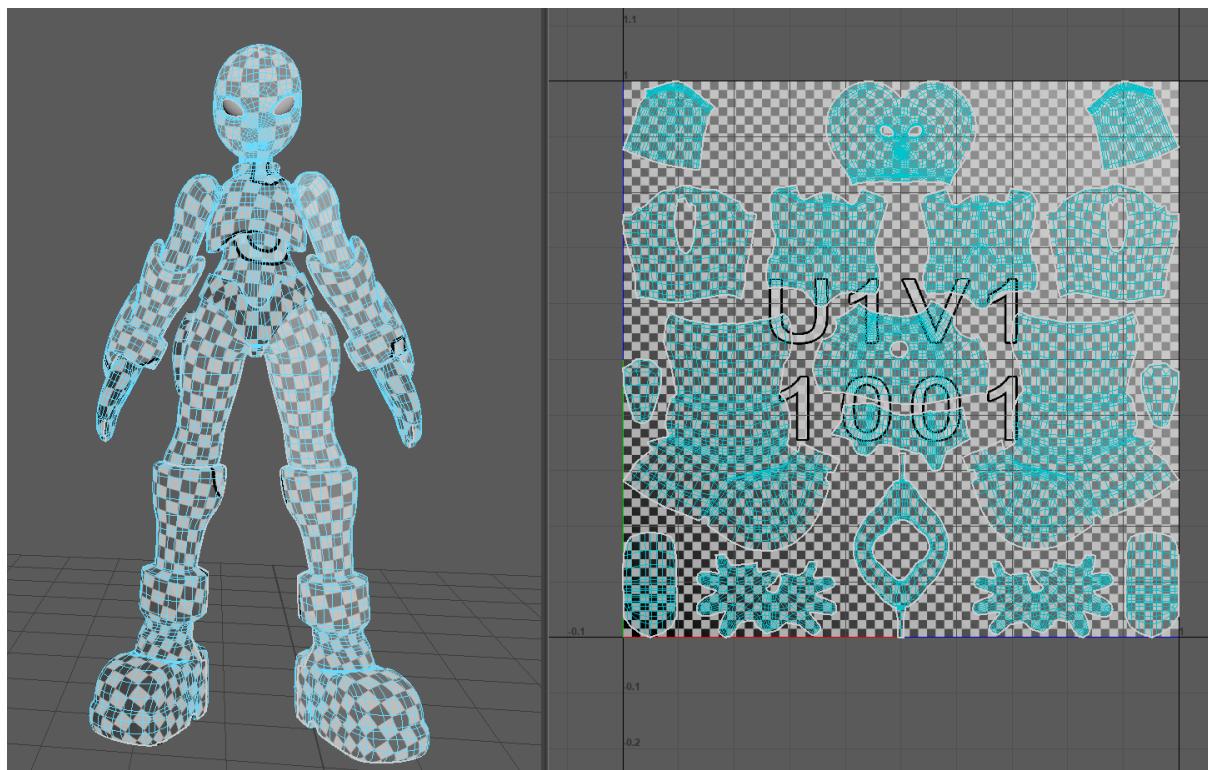
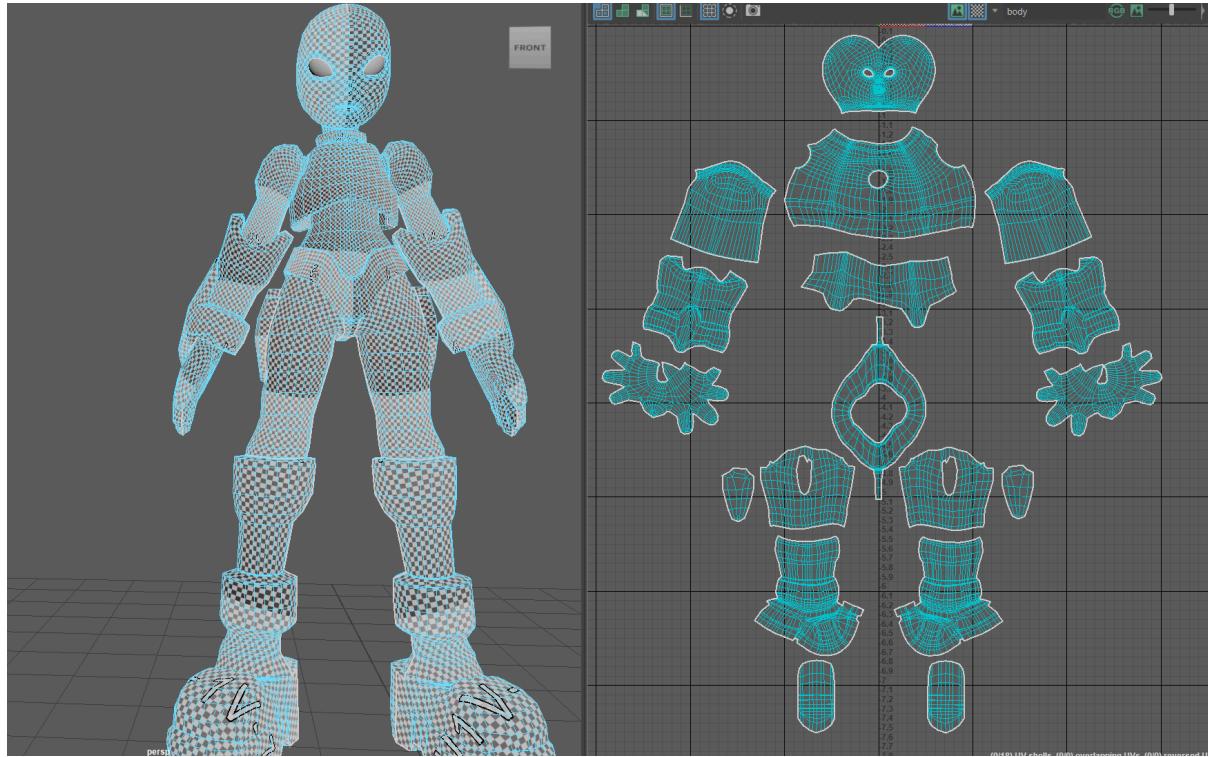
- Used shadow matte on the floor plane and added skydome light



- Added a texture (test) then started UV Mapping



- UV mapped the clothes

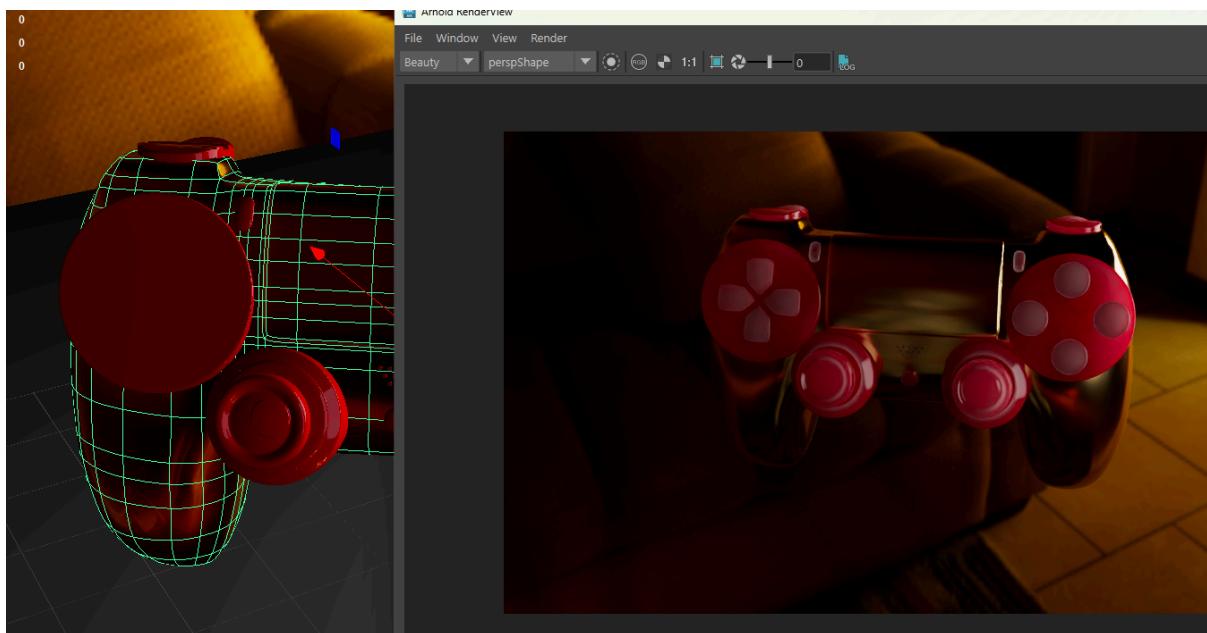


- UV mapped the rest, made the texel density the same for the body parts and clothes, fit them all into the 1x1

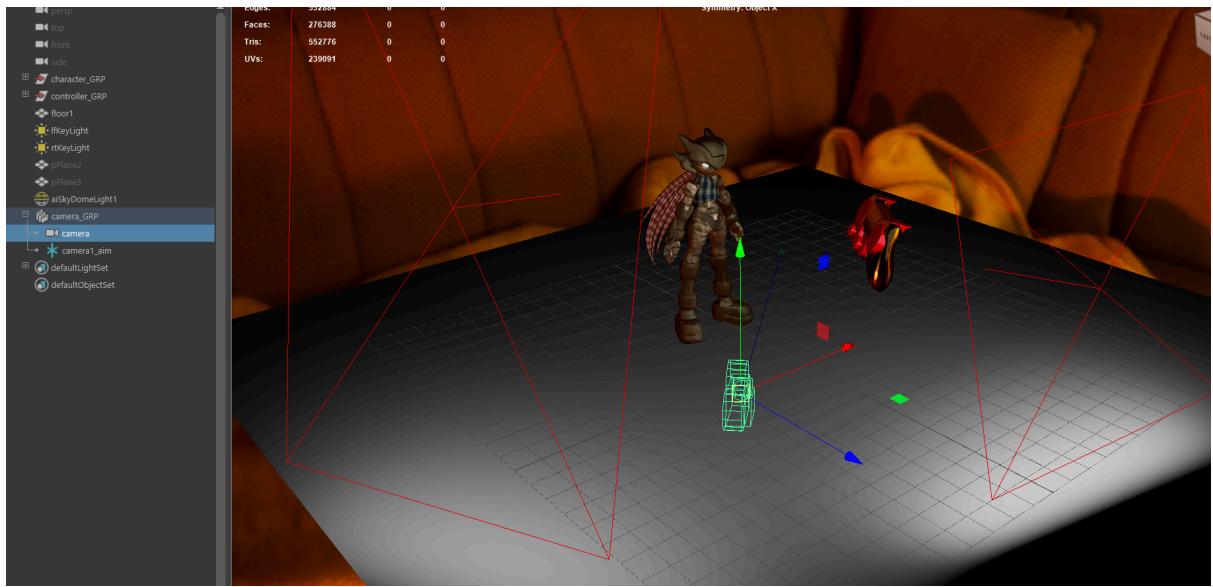


- Added metal, rock, and fabric texture with roughness, bump, and displacement maps.

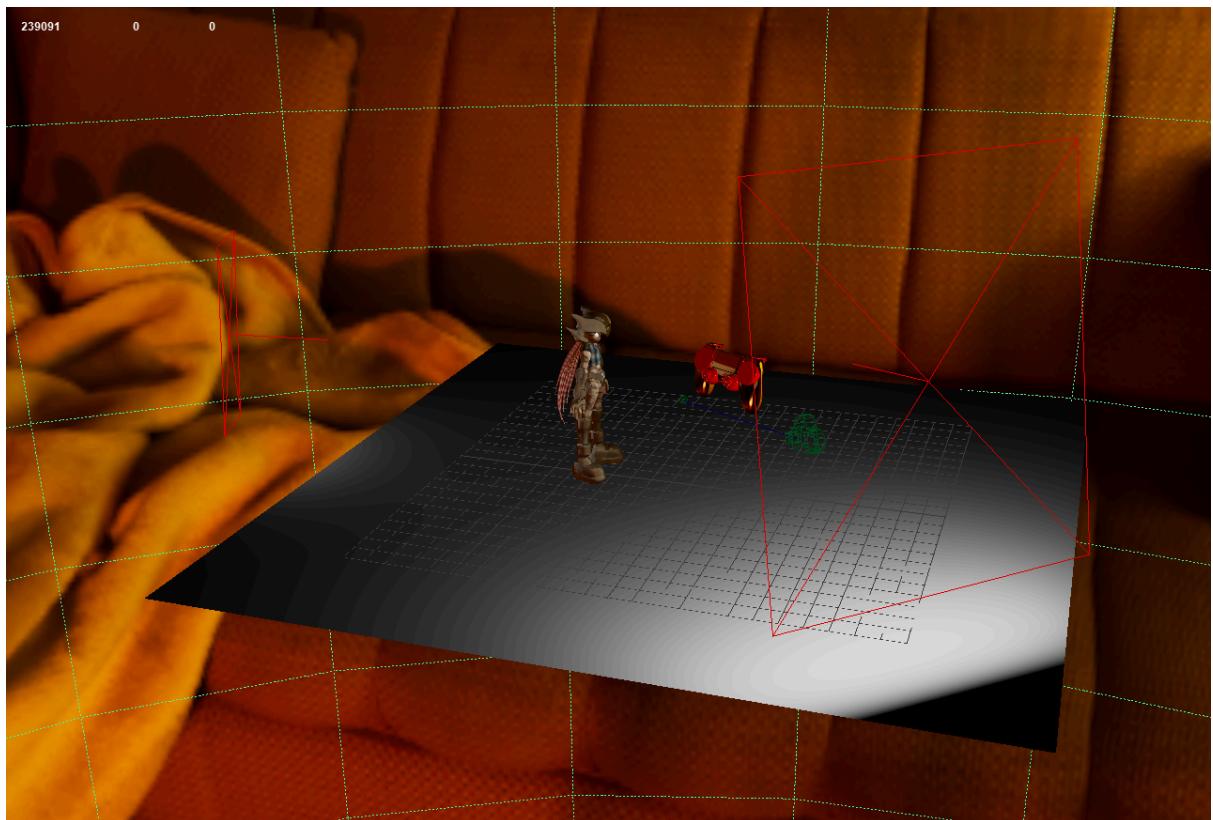
Not gonna add texture to eyes



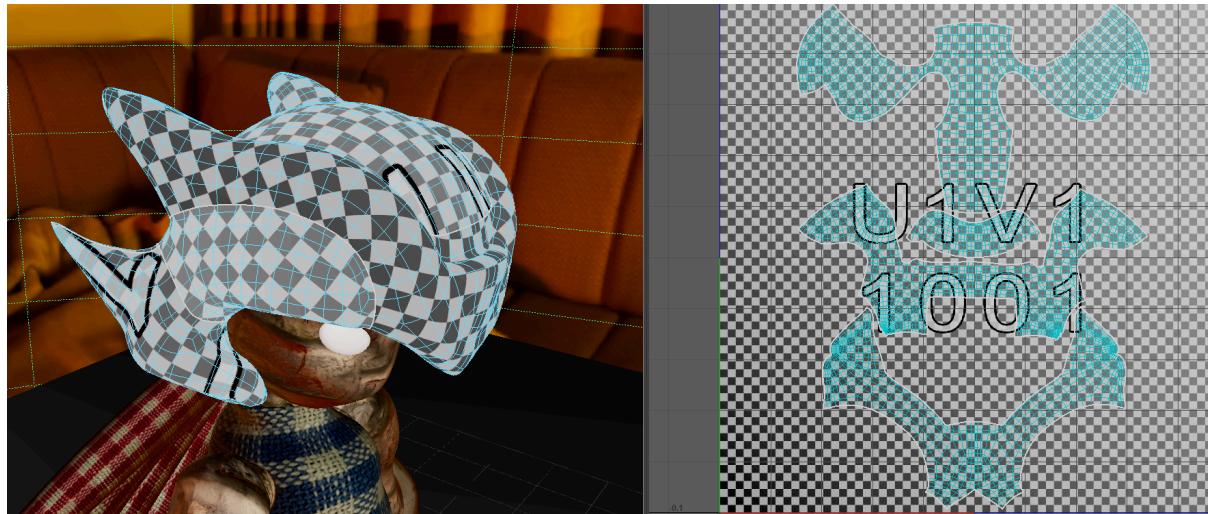
- Smoothen my controller using sculpting tools and added some shaders to my controller that resembles gold and blood



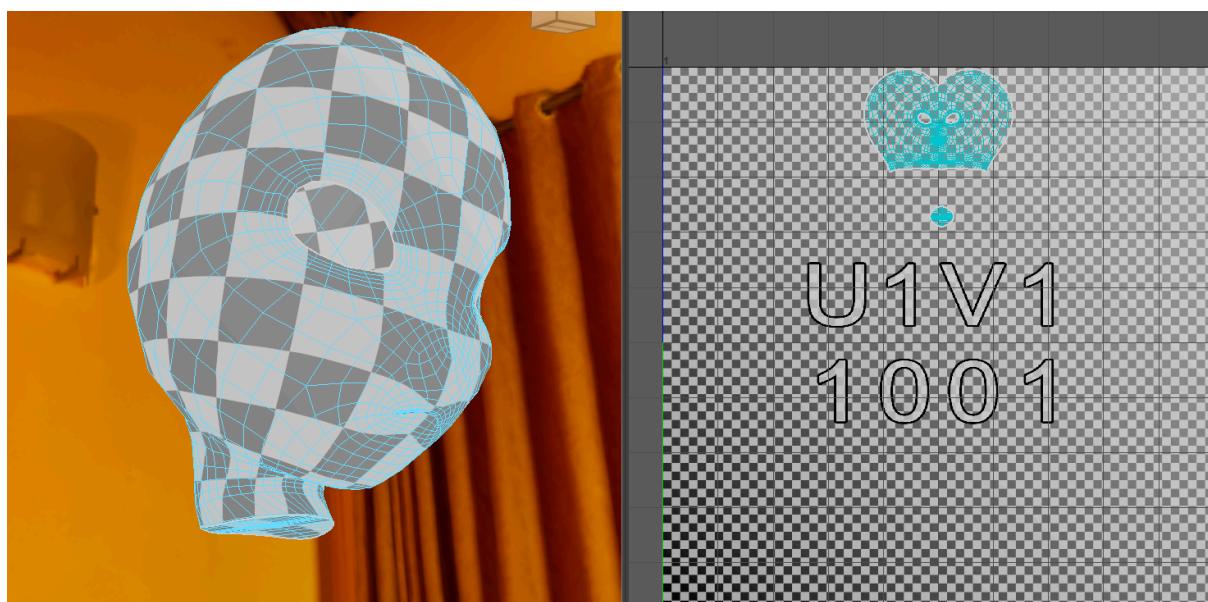
- Added an additional camera for the render and set up angle of view, focal length, depth of field in arnold, focus distance to match the distance of the camera, and a little bit of aperture size for better view/theme



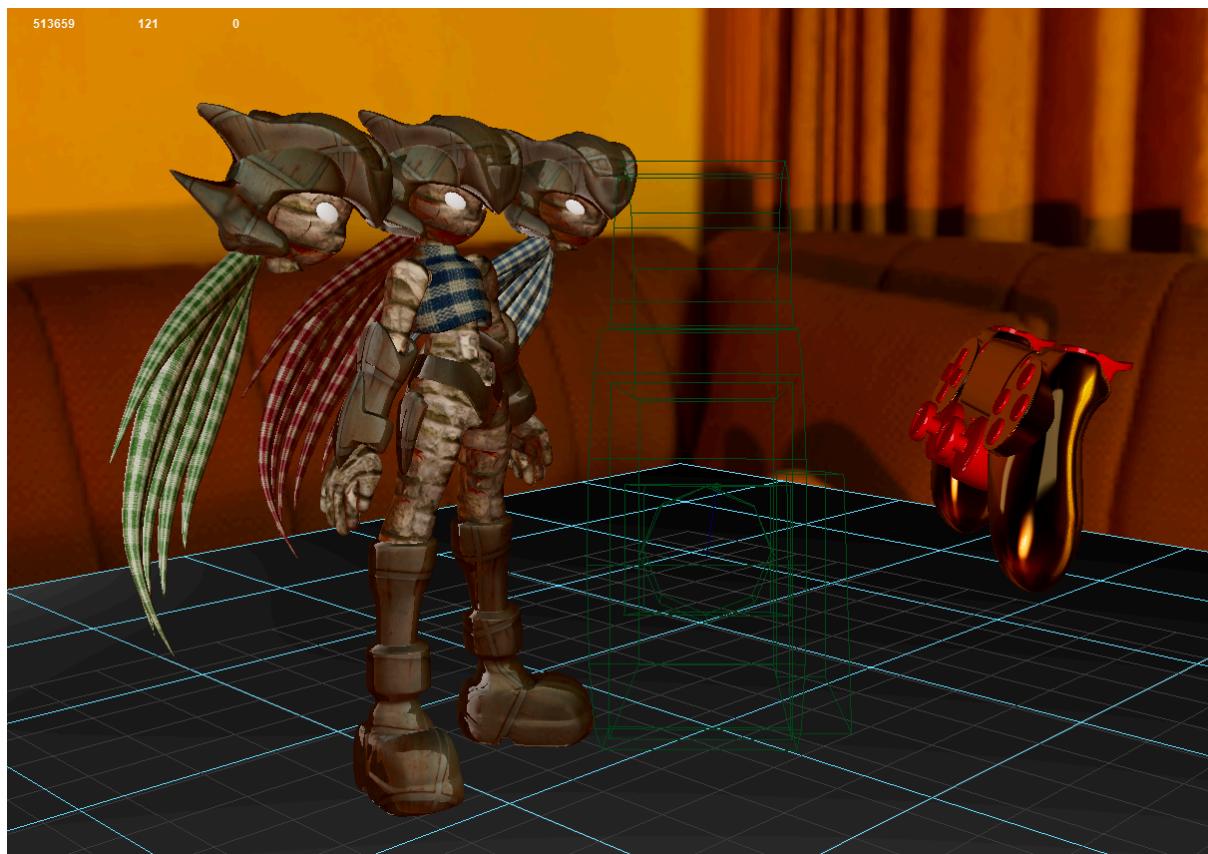
- Adjusted the lights of both area lights and light dome to better show back and front of both controller and character



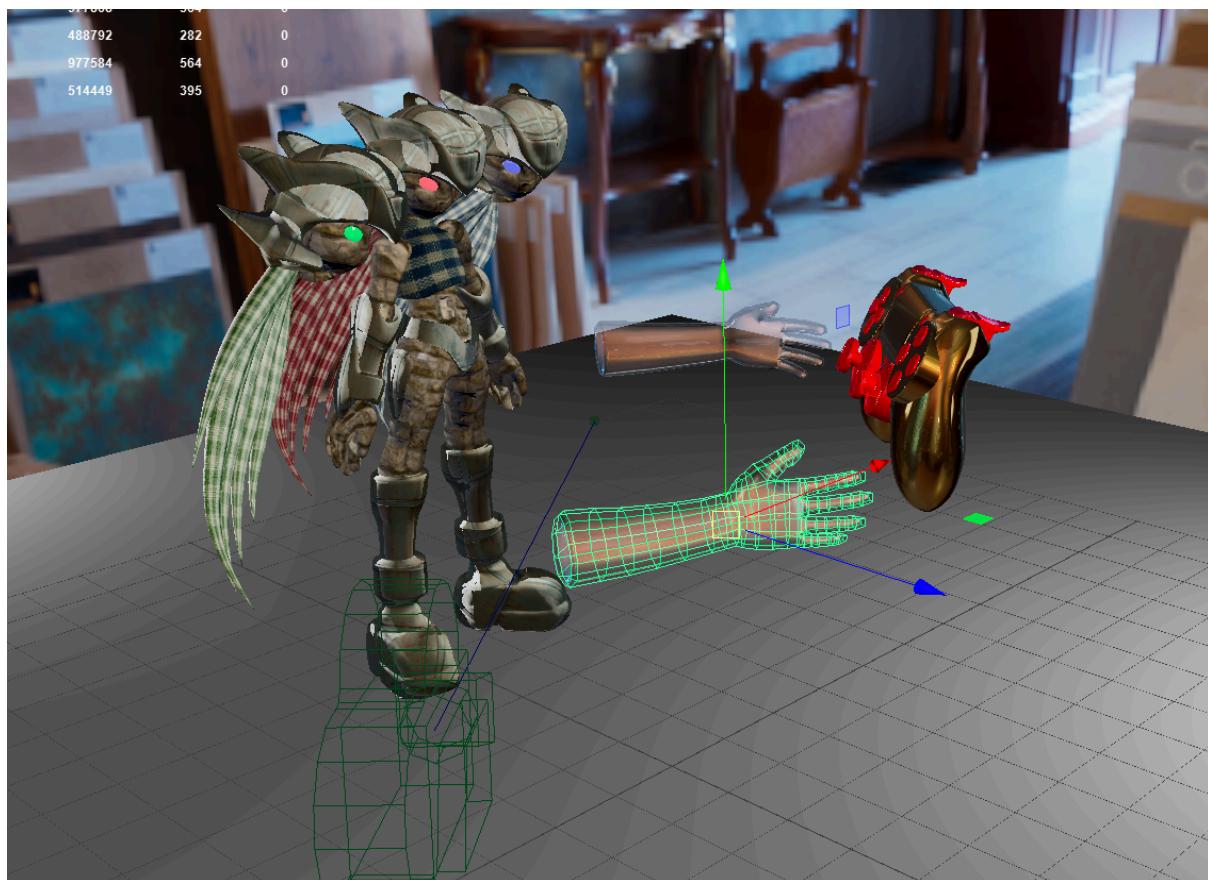
- UV mapped the helmet



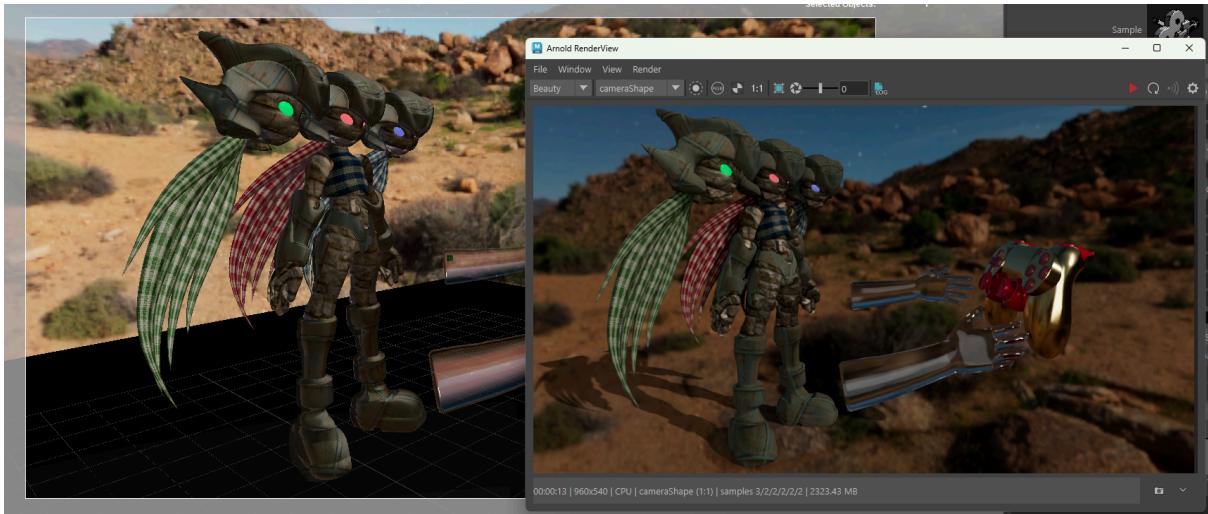
- Duplicate the head, helmet, eyes, and hair, fill holes and UV mapped the head.



- Did it 2 times, the texture pack comes with 3 different colors so I used all of them



- Added 2 hands from maya content browser (mirrored the 2nd one) and added a water shader



- Adjusted different shaders such as metalness and roughness of the controller body, intensity and exposure of the lights, and also the position of the skydome image to produce a fairly good shadow of the character. Added backlight to illuminate the back of the characters as well as tone down its shadow a little bit.



- Final Render