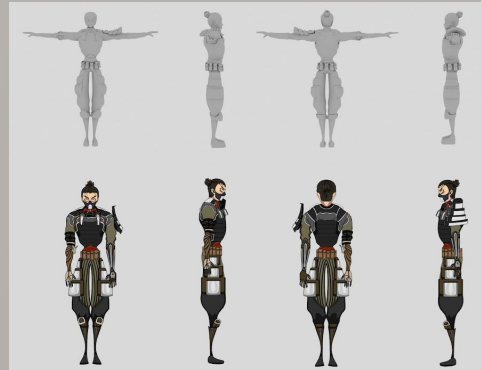
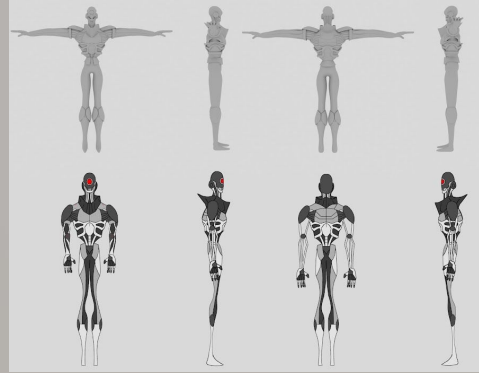




# Major Project: Traditional Vs Technology By Ronnie Leah

## Goals For The Major Project

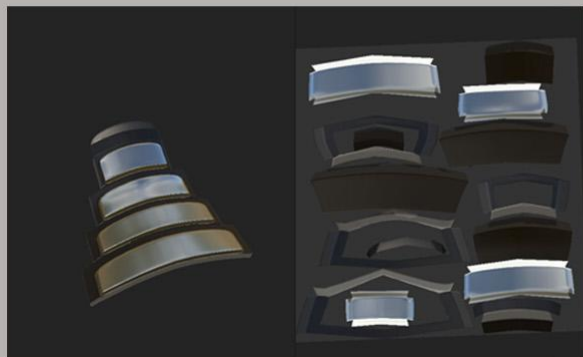
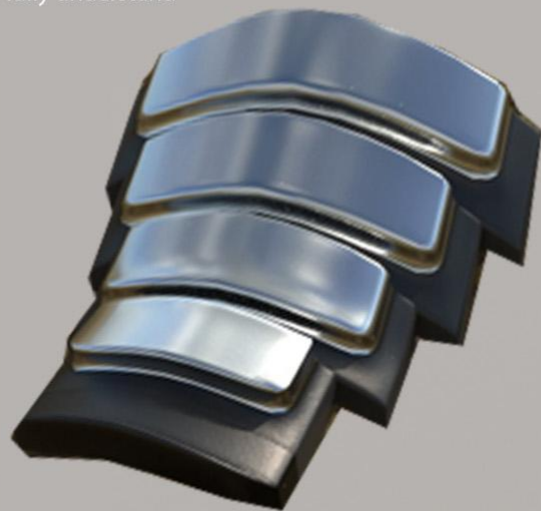
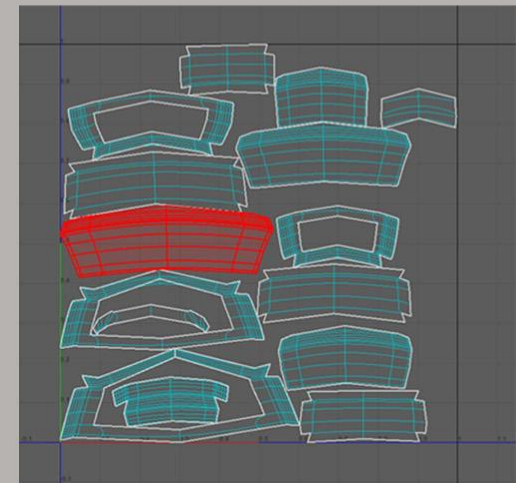
At the end of the Minor project, I had completed the redesign of my animation story and characters and applied my ideas to create a Pre-viz which depicted the events of the second iteration of the animatic. I then set myself the goal of completing the texturing, rigging/skinning, final modelling of the environment, animating, lighting and editing for the Major project. I had a lot to complete however had a solid foundation to continue from, having modelled the final version of both the characters and a clear guide of how to animate thanks to the detailed second version of the animatic.



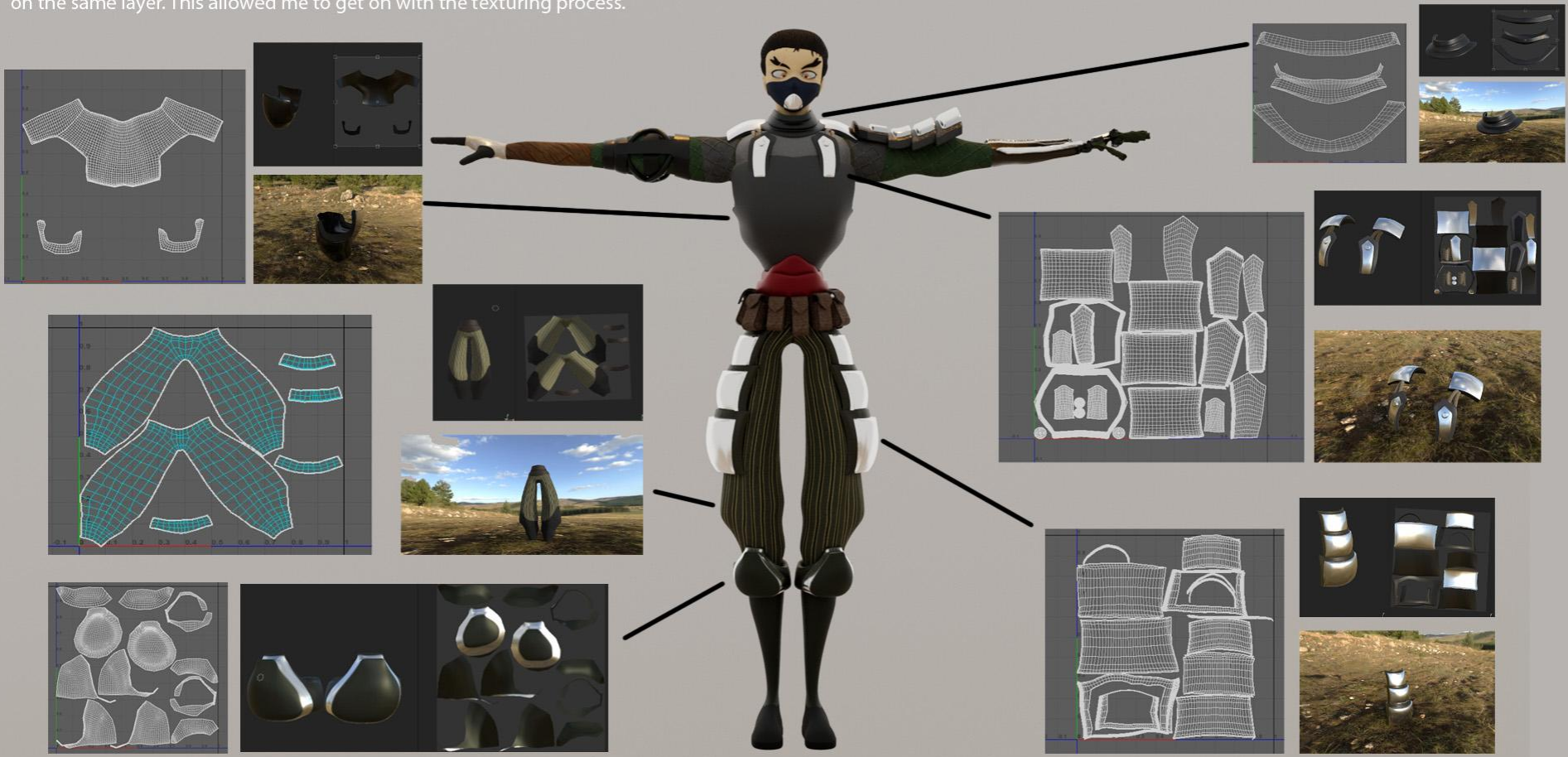
As I had been learning how to use Substance painter throughout the Minor project, I was eager to finally have the chance to texture my own models. However I first had to UV every part of both character models before I could do so. This was a challenging hurdle to overcome at first as I felt very unconfident with creating UV's for complicated shapes. I did however have the experience of UV'ing the Jetpack Jones character from Year 2.

I decided to watch a few videos online in order to fully understand

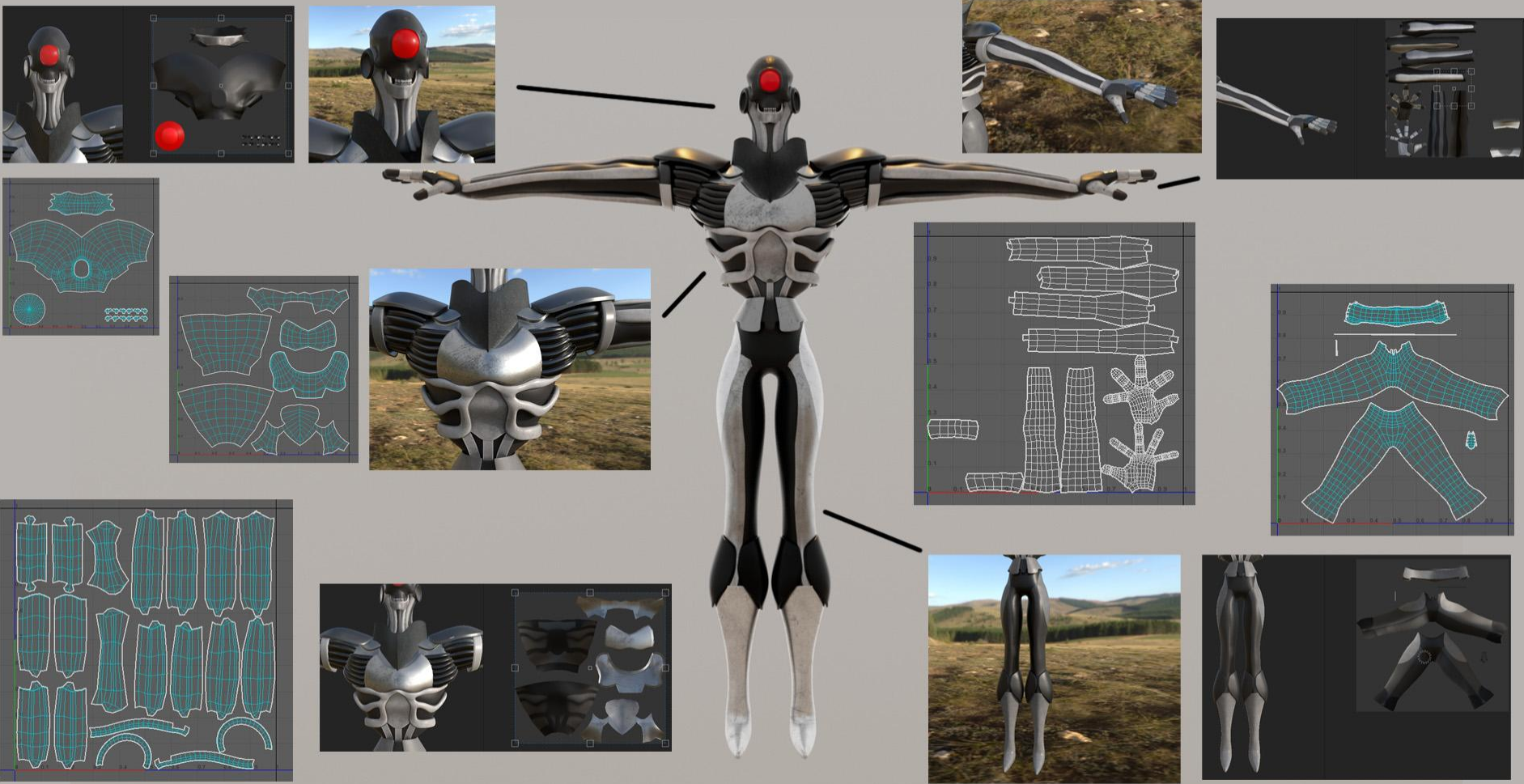
Once I had a better understanding of what I was trying to achieve from the UV, I decided to start with the Samurai's arm shield. This was one of the more simple objects as it was made out of a set of cube's. I was able to successfully translate what I had learned from watching the video and could then move on to texturing the model. I was really pleased with how this first model turned out and was motivated by the fact that I wanted to see what both character would look like fully textured.



After UV'ing the first model I quickly learnt that if an object was made out of a cube, I could simply select the same 7 edges and it would unwrap in a clean way. This could be used on a surprisingly lot of the geometry, even the models that were not necessarily made from a cube. As I wanted to see the full characters textured, I went from texturing single parts of the model to importing the whole thing. I instead set each part of the model onto a layer by applying different coloured materials in Maya and naming them what I wanted the layer to be called. I split the model up based on the arrangement of its UV, trying to fit as much as possible on a single UV tile. Substance would then recognize the same colour objects as being on the same layer. This allowed me to get on with the texturing process.



I then followed the same process with the Cyberpunk character. This was a lot easier the second time around as I could just copy my previous workflow. I really enjoyed experimenting with the different types of metal in order to get different looks for the character. I feel that the textures make this character stand out a lot more, especially in the face.

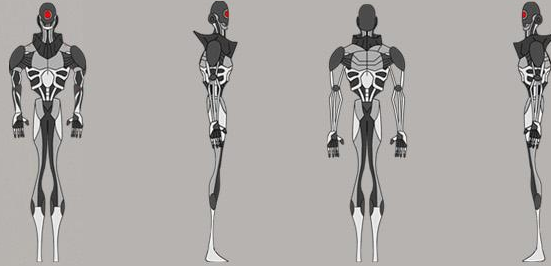
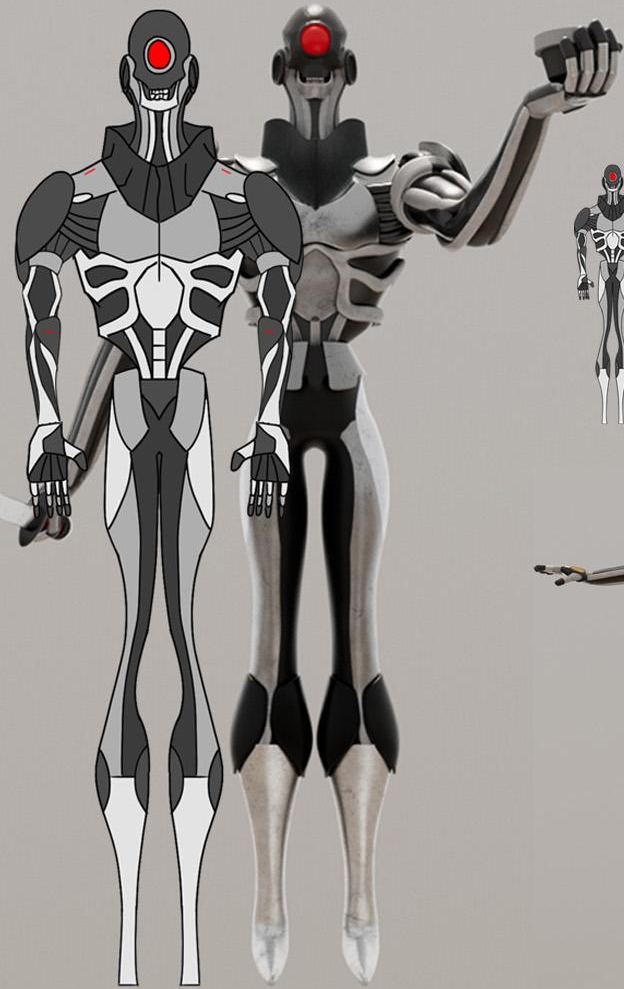
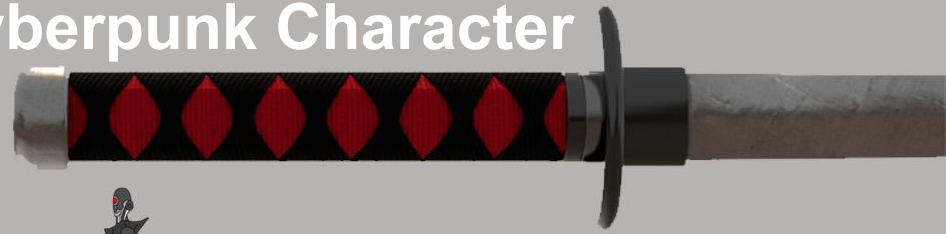


# Final Samurai



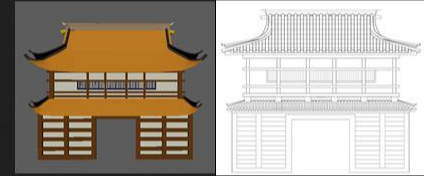
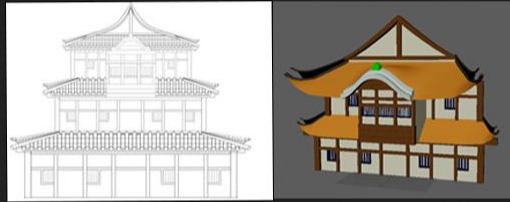
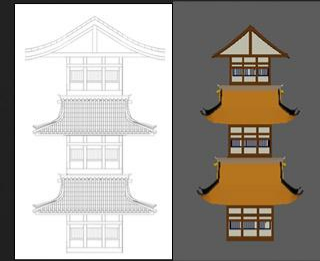
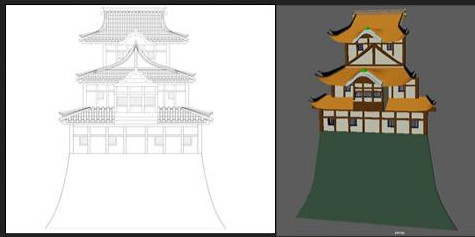
With the UV'ing done I was able to move on to the texturing of both characters. I used my texture map plan as reference as well as the drawings I had create to do so. I then went one object at a time, experimenting with different materials to see what results I could get. I finally arrived on the following images as the final look for my characters. I was really pleased with how the characters turned out and enjoyed the process of texturing as it allowed me to be creative with different materials. The results are far quicker than traditional texture, meaning you can come up with a range of looks in a very short amount of time.

# Final Cyberpunk Character



Below is the final version of the Cyberpunk character. I was really pleased with how close the final model looks to the drawing. I remember being unsure how I was going to skin the arms, however corrective blendshapes solved this problem.

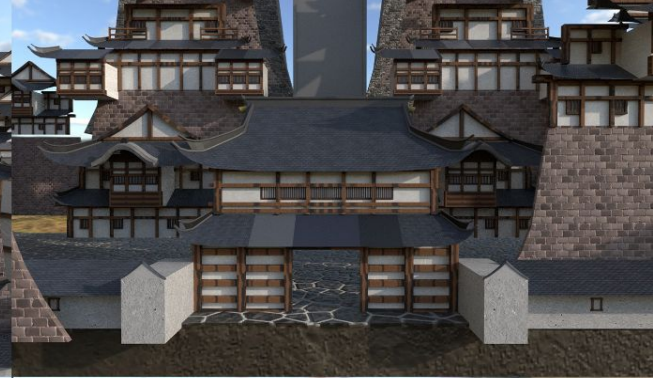
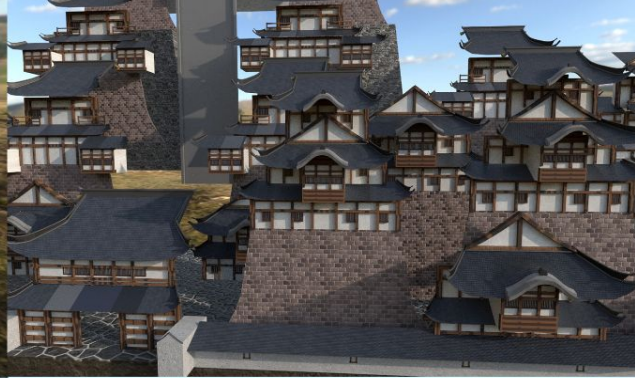




I then decided to move on to making the object in the environment of my scene, starting with the Japanese Palace. I was very aware that I was doing a character based project and not an environment project and so should prioritise making sure the characters are rigged. As well as this I wanted to make sure the Japanese Palace would not be too detailed as this would significantly slow down the render times. This is a problem as it is only intended to be a background object in order to set the scene. Although it plays a part in the story it is still less important than making sure the character were done in time.

For this reason I decided to model the Palace in the same way in which I drew it. I modelled different types of roofs and walls. Then constructed each style of building with the appropriate parts. This however only needed to be done for the front of the building as this is the only angle the palace is seen from. This will help to save on rendering and model time.



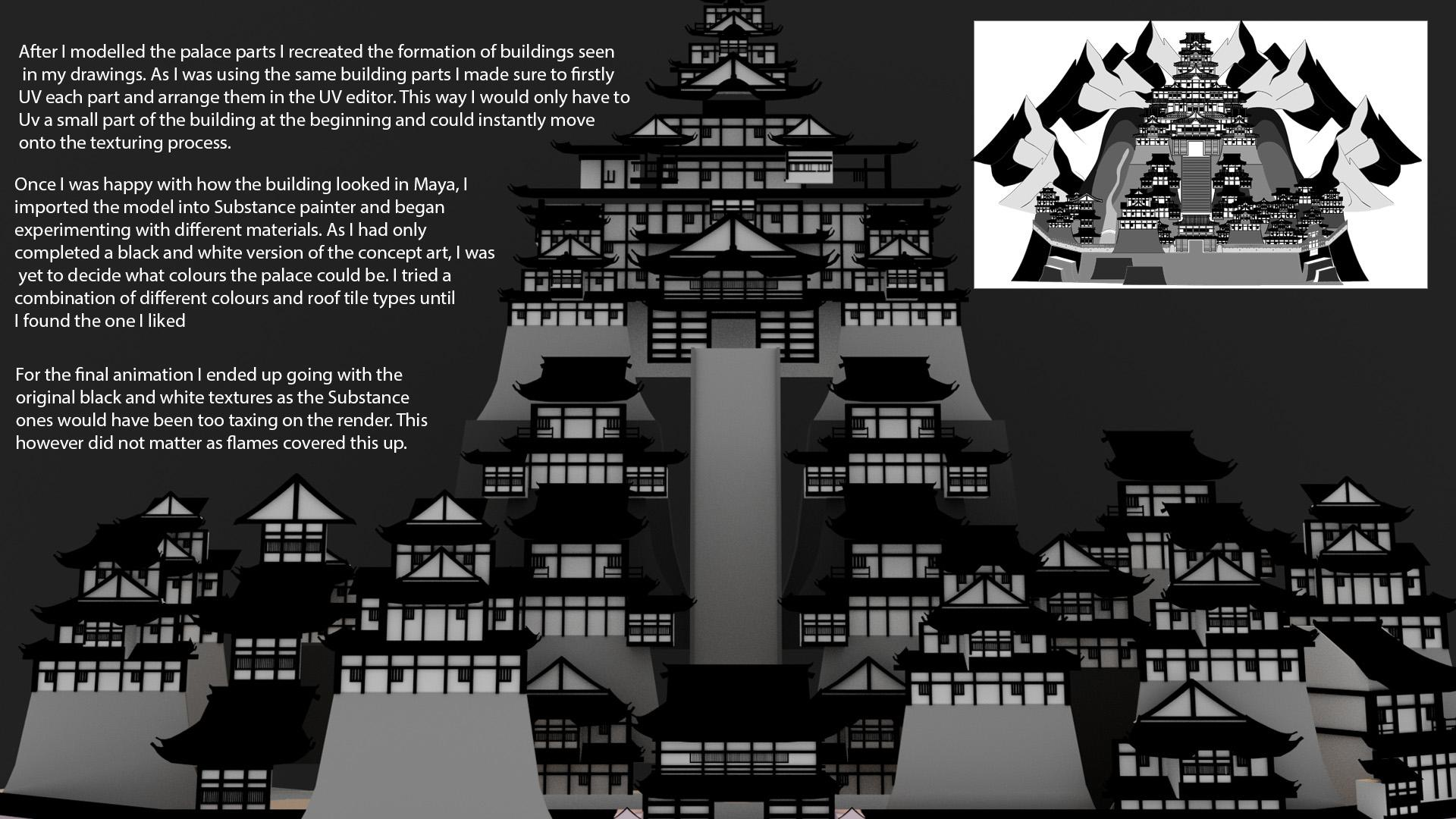


After I modelled the palace parts I recreated the formation of buildings seen in my drawings. As I was using the same building parts I made sure to firstly UV each part and arrange them in the UV editor. This way I would only have to UV a small part of the building at the beginning and could instantly move onto the texturing process.

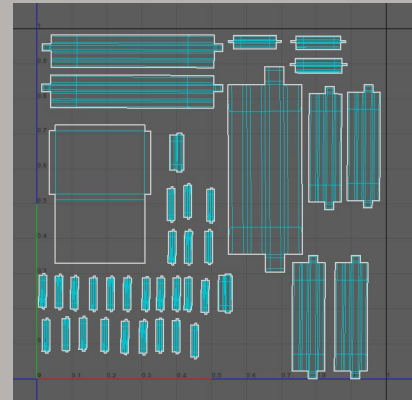
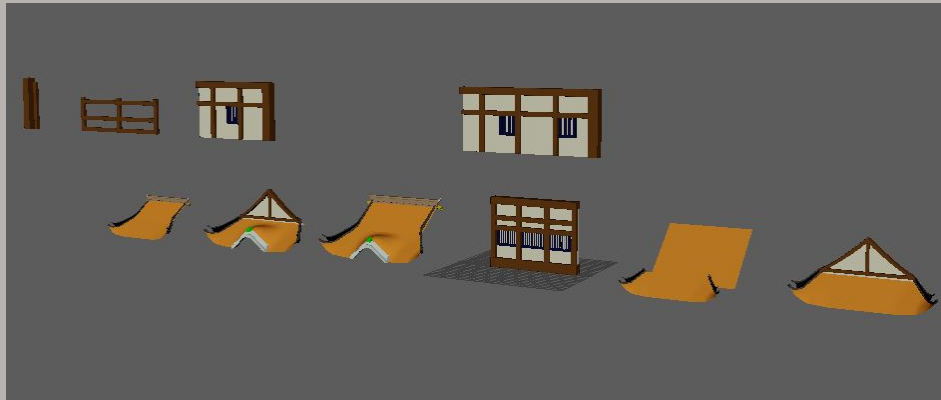
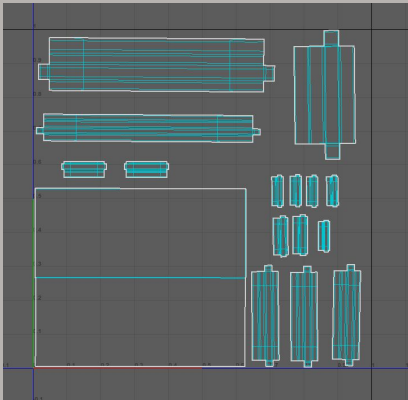
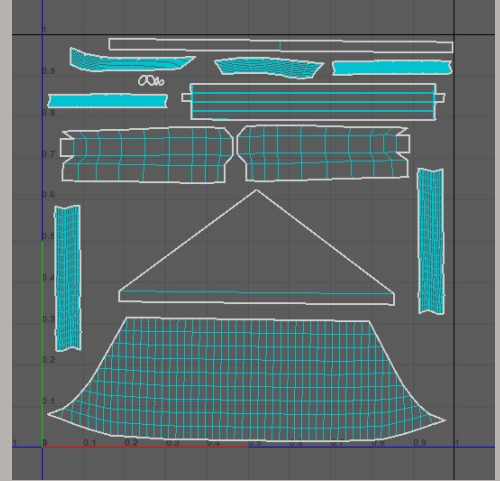
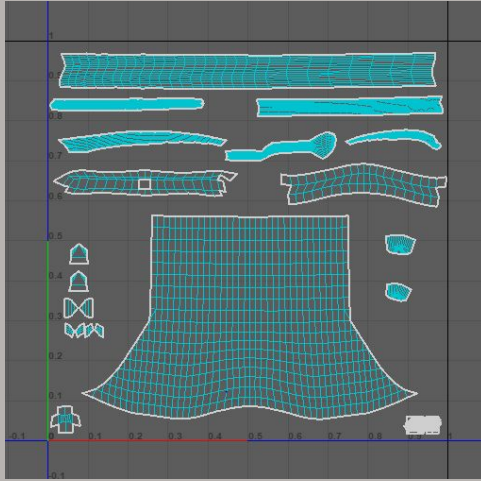
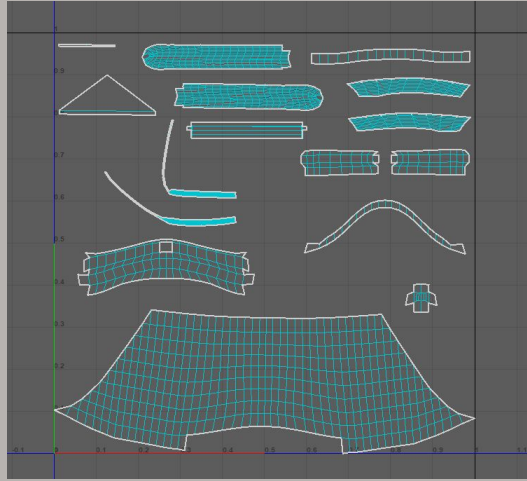


Once I was happy with how the building looked in Maya, I imported the model into Substance painter and began experimenting with different materials. As I had only completed a black and white version of the concept art, I was yet to decide what colours the palace could be. I tried a combination of different colours and roof tile types until I found the one I liked

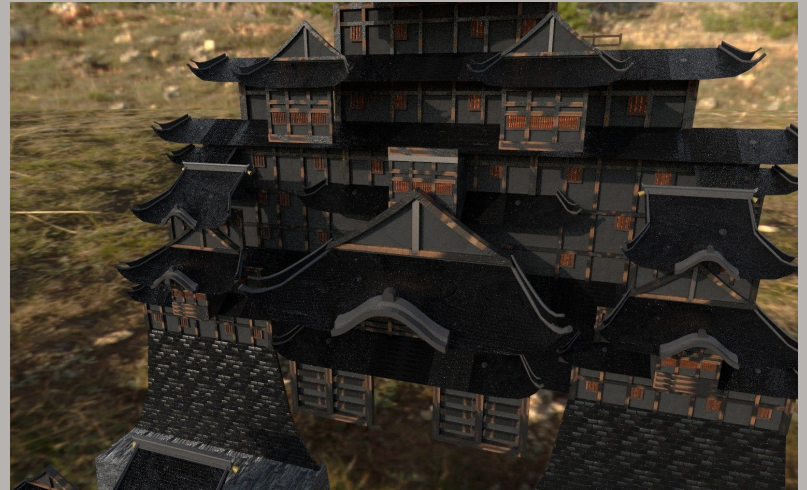
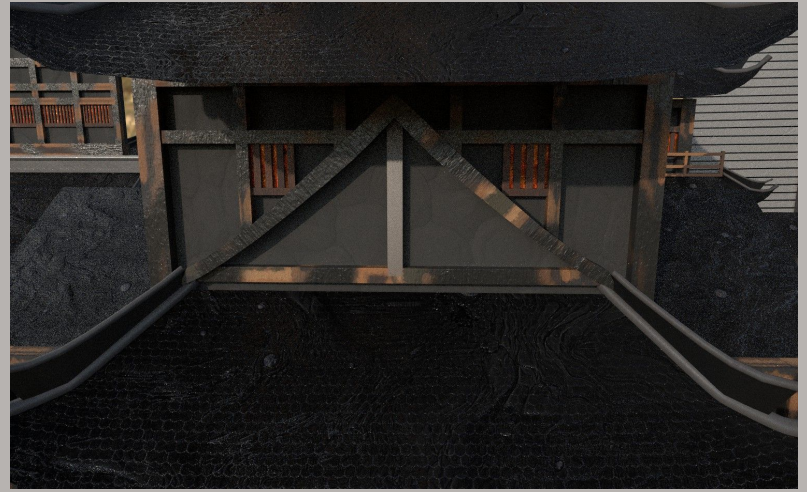
For the final animation I ended up going with the original black and white textures as the Substance ones would have been too taxing on the render. This however did not matter as flames covered this up.



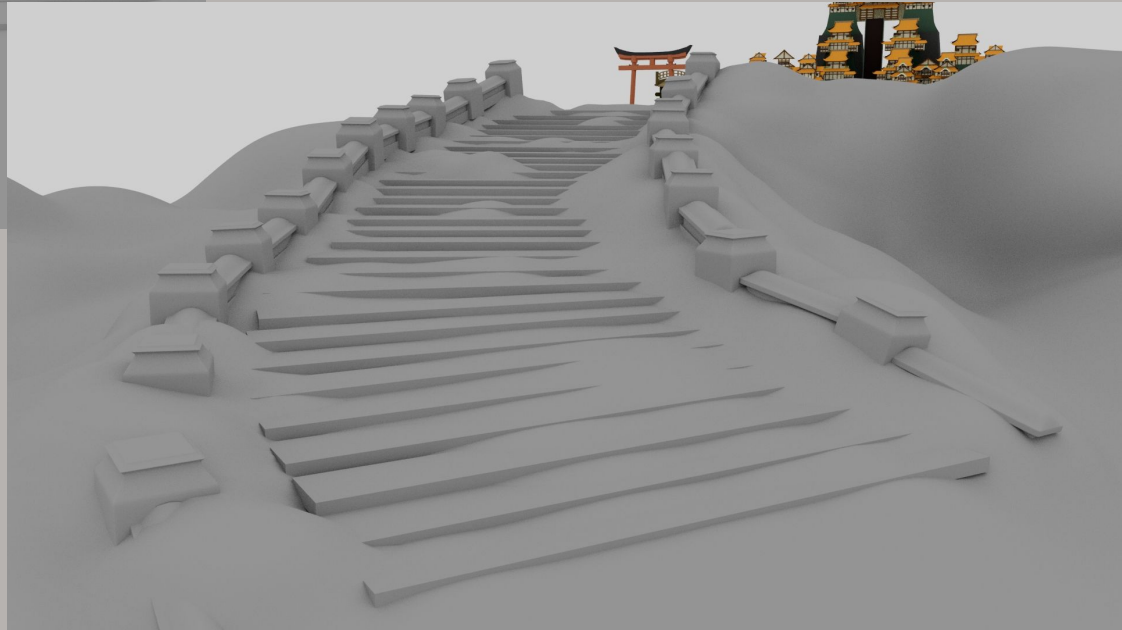
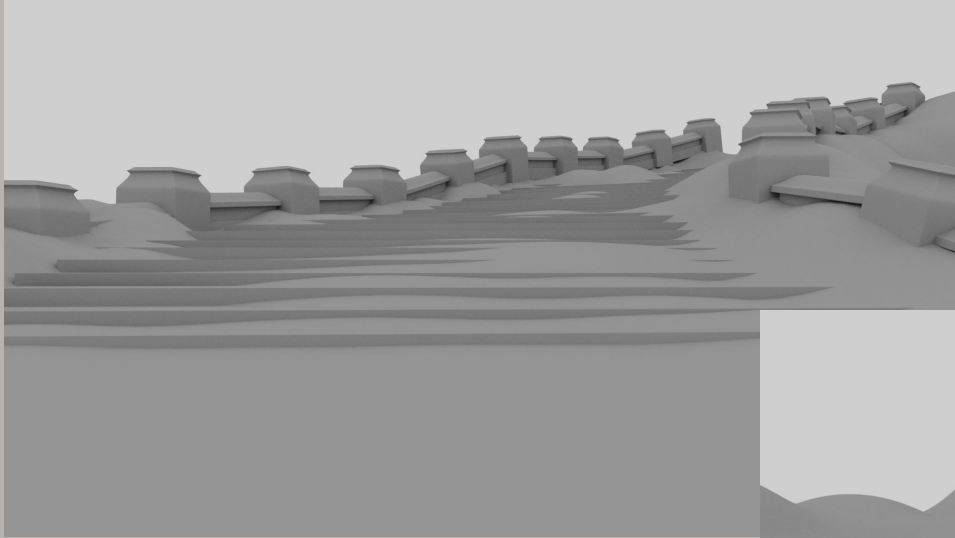
# Environment UV + Texture



# Environment UV + Texture

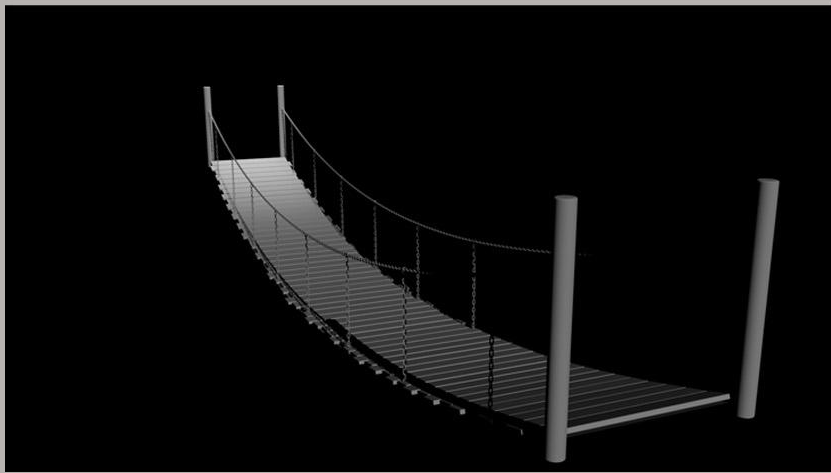


# Revisiting Environment

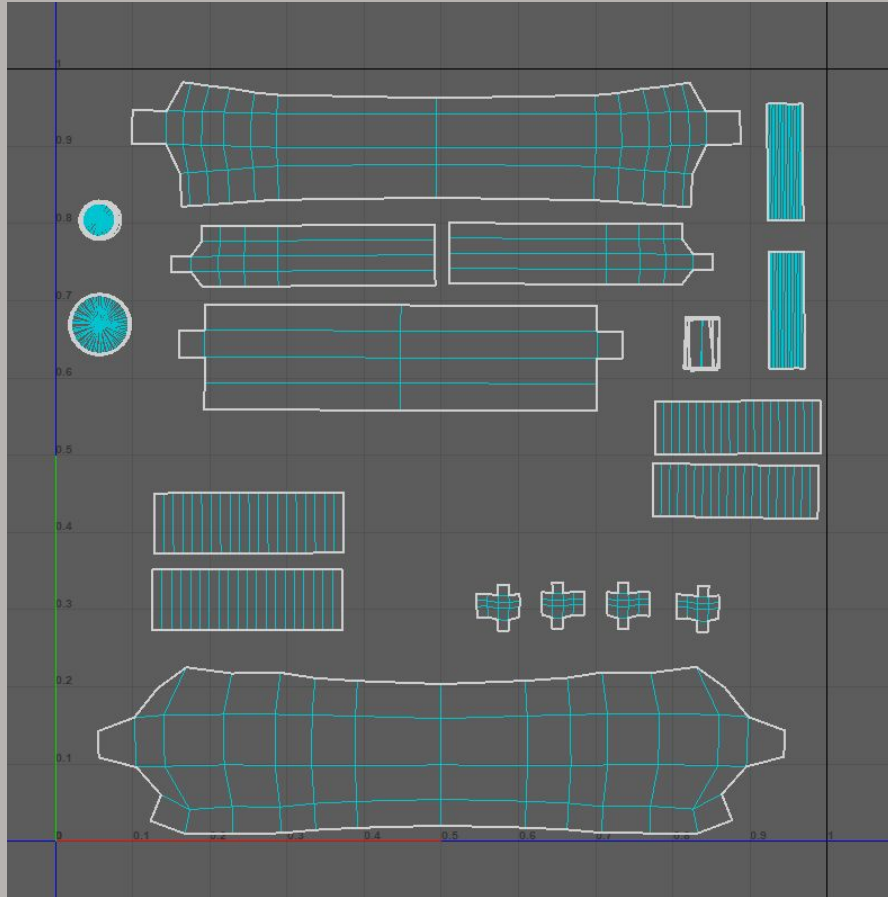


# Scene Objects

There were very limited objects in the scene as my project was character focused.

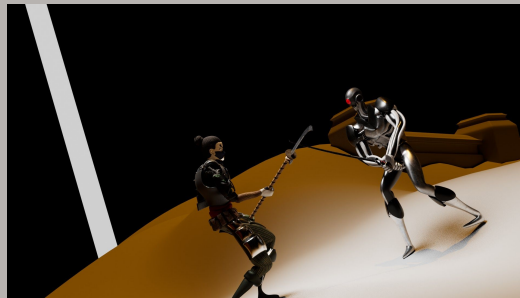


# Environment UV + Texture



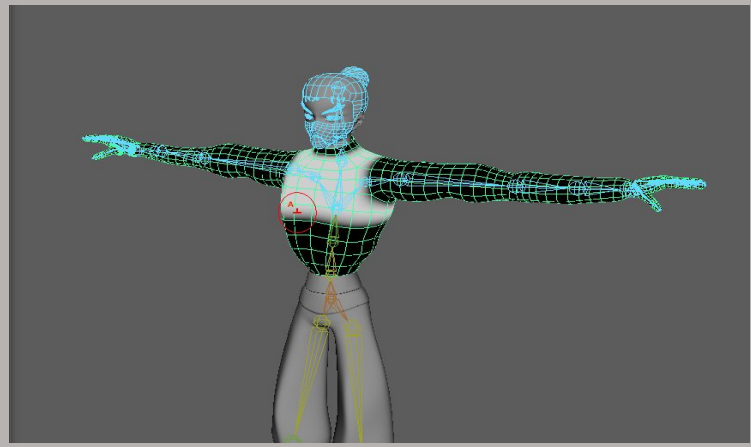
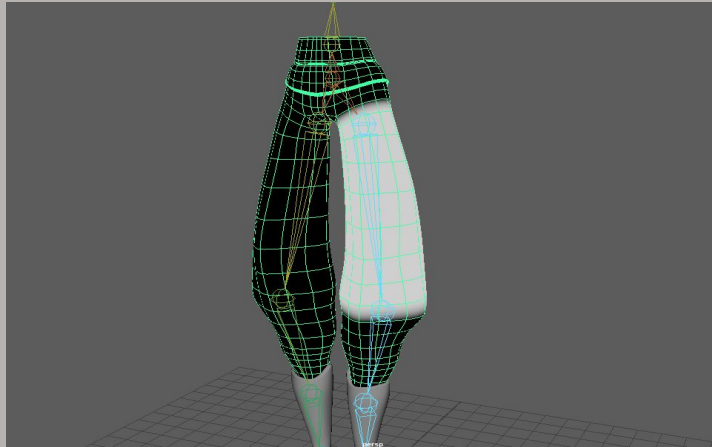
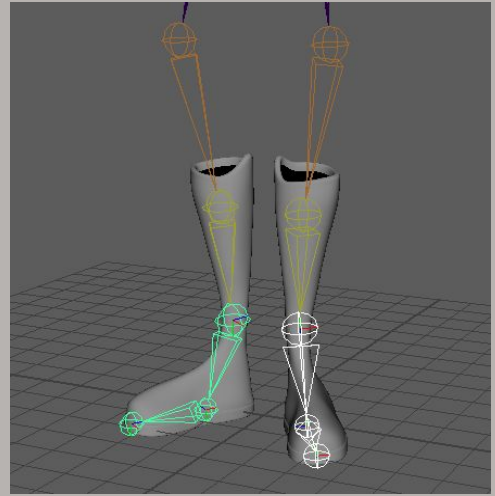
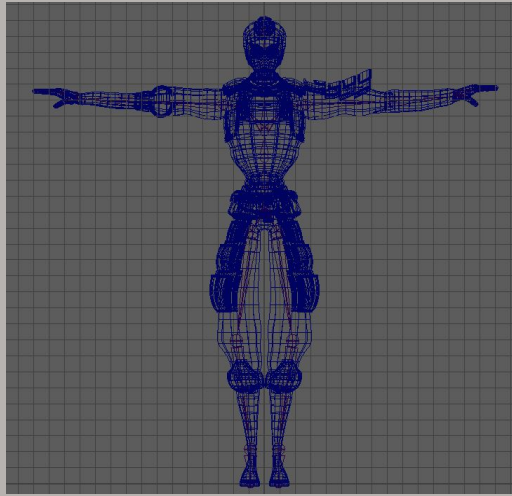
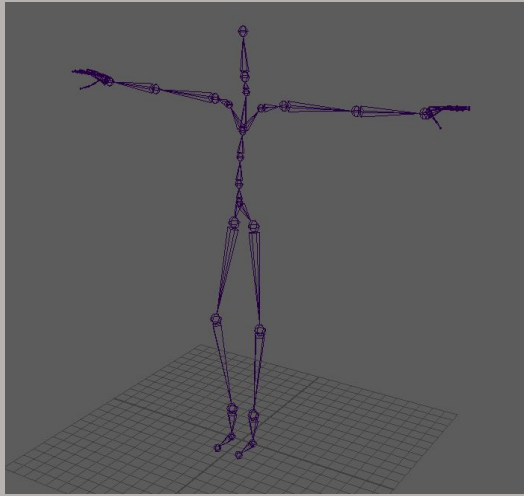
One of the main plot points I had yet to address was the the fire which is engulfing the Japanese Palace. In the story the Samurai has been betrayed and what is left of his world is set on fire. This is quite a bit plot point in the animation so I knew I couldn't just skip it. After thinking it over I remembered Maya has a content browser full of premade objects and effects. As I was running out of time I decided to give it a go to see if I could get this problem solved. After experimenting with the different effects Maya offered, I decided to go with their fire.smoke effect. I started with small flames which looked okay, however wasn't quite relaying the drama of the scene. I then decided to add two more additional fire.smoke and increase the size of each one until I got the effect I wanted. This resulted in the shot I managed to create below which I am really happy with as I feel it perfectly relays the shock of the scene.

From this point on I decided to make the directional light orange, further conveying that the Japanese Palace is on fire.

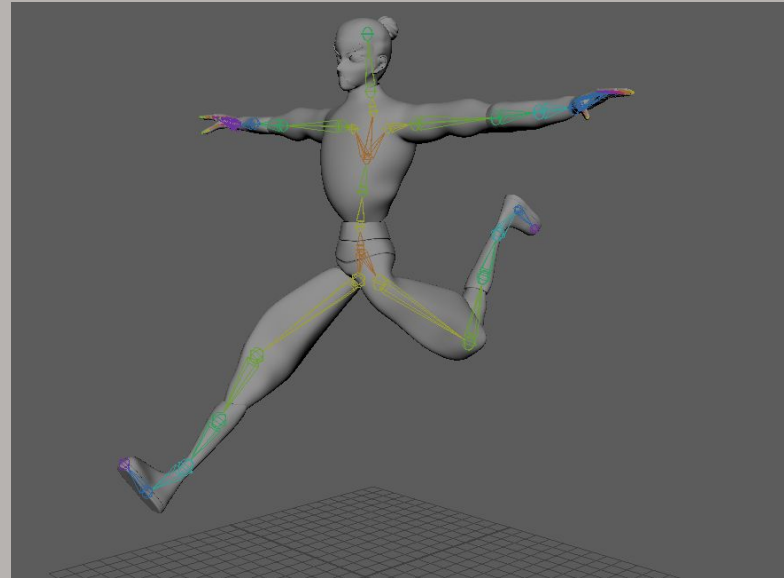
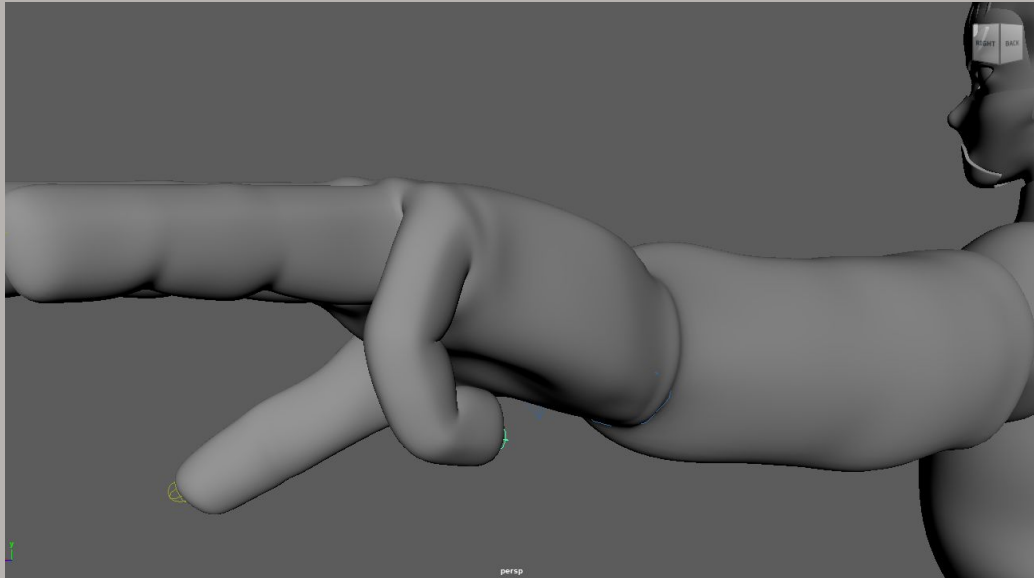
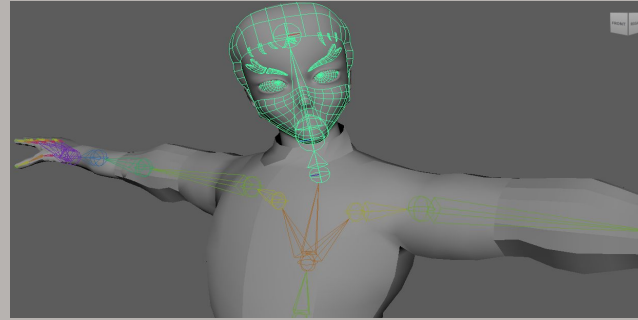
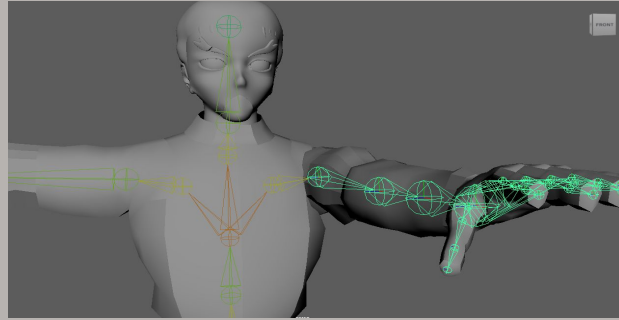
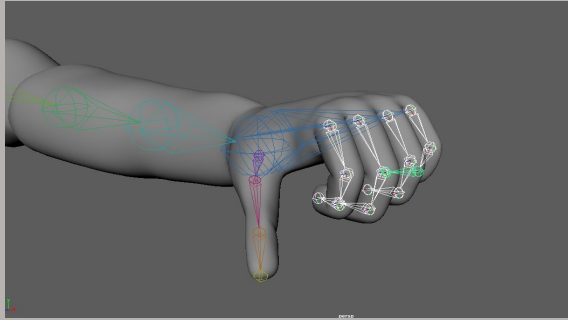




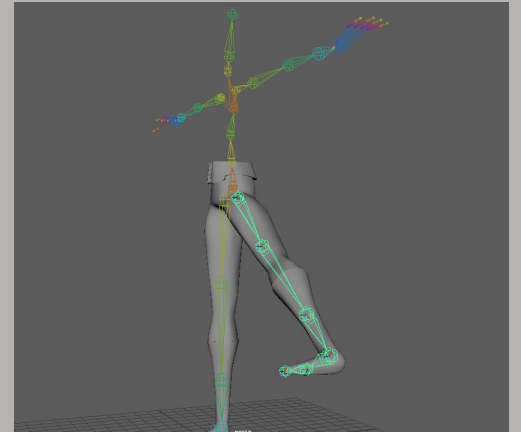
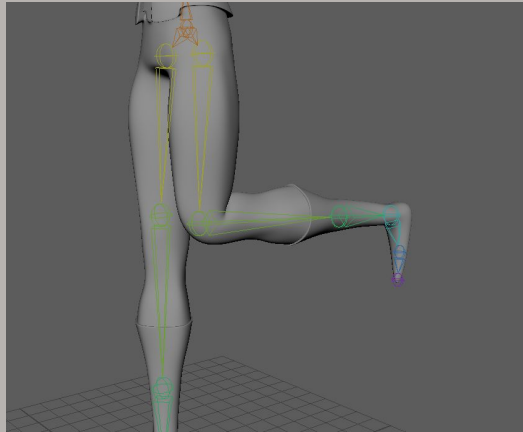
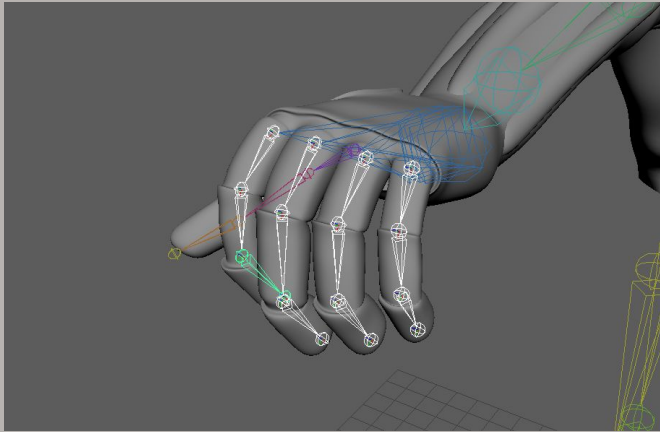
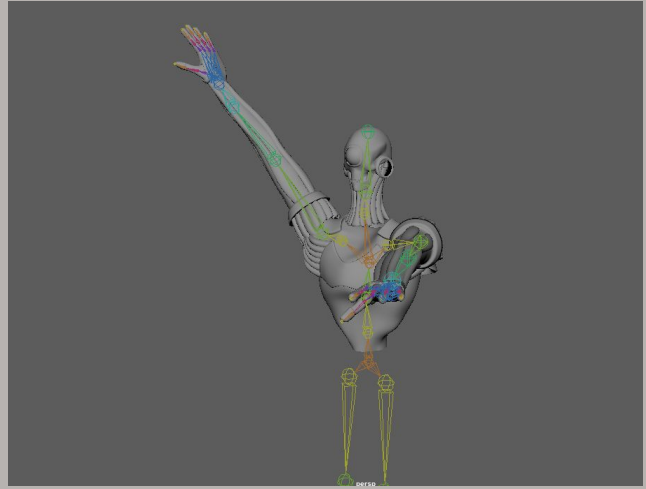
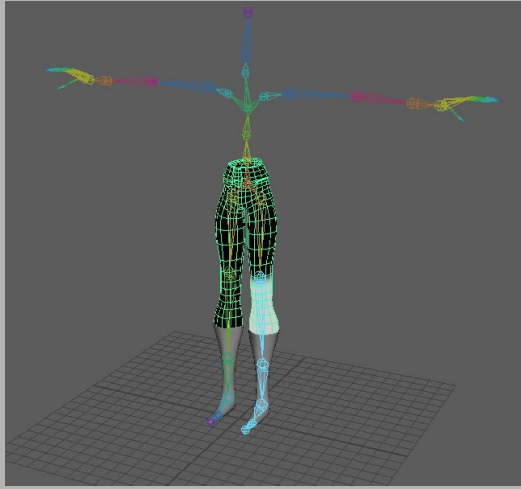
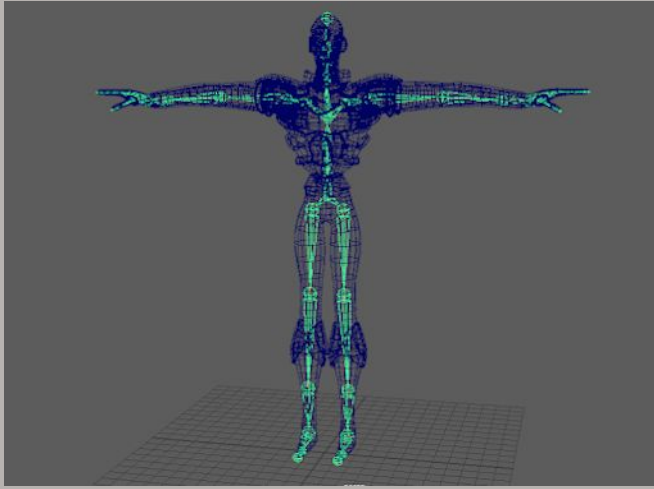
# Samurai: Rigging + Skinning



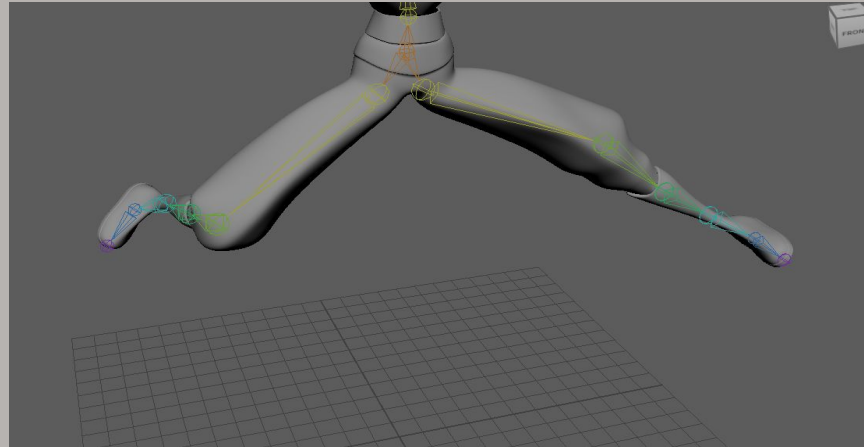
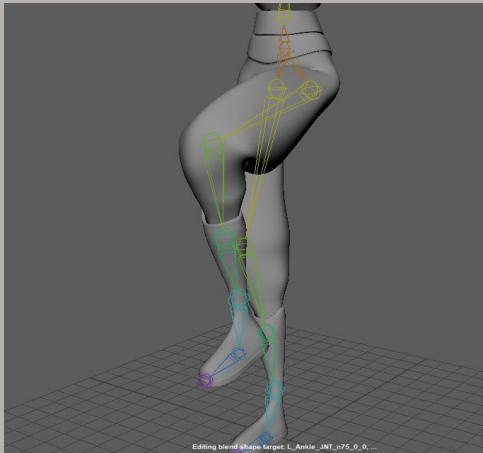
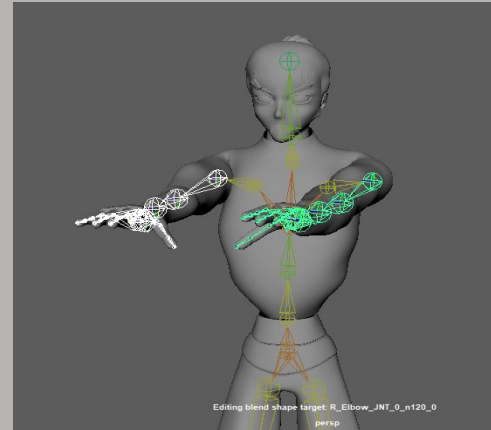
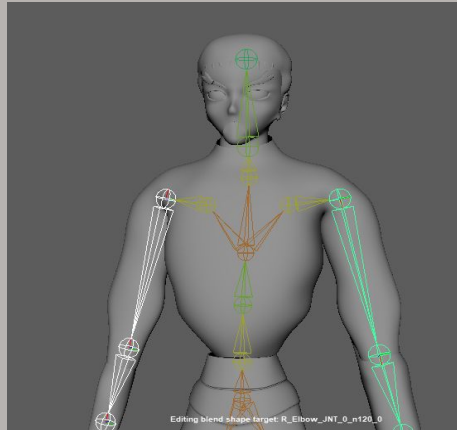
# Samurai: Rigging + Skinning



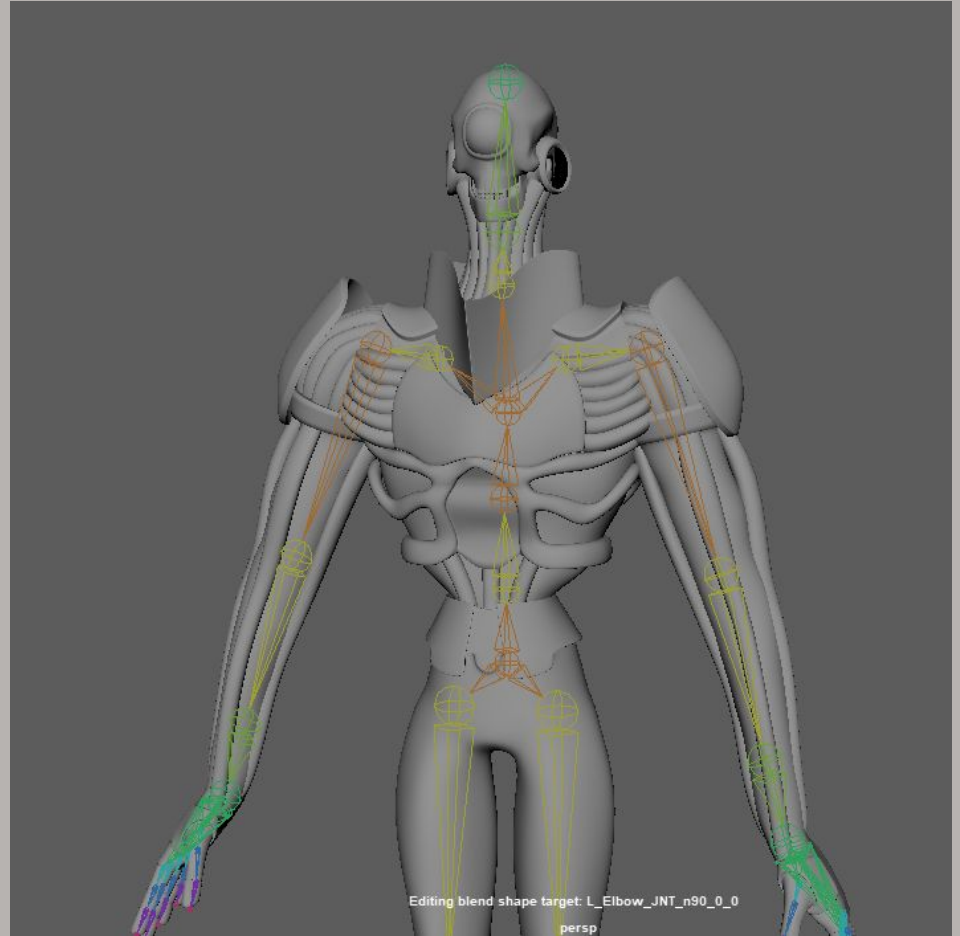
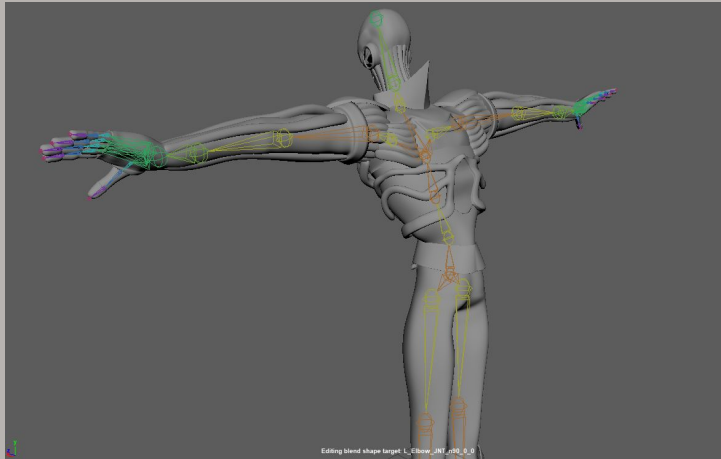
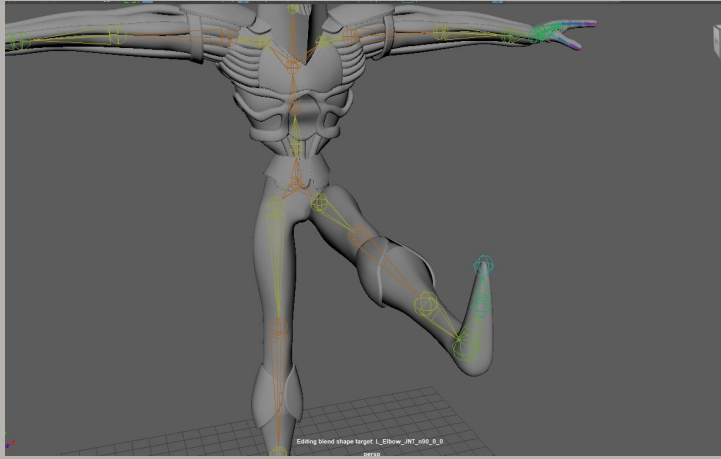
# Cyberpunk Character: Rigging + Skinning



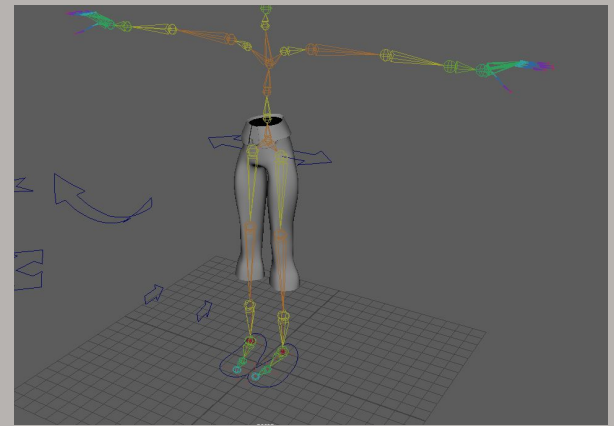
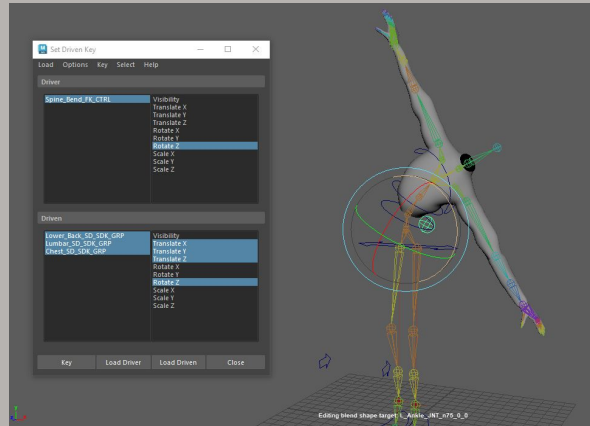
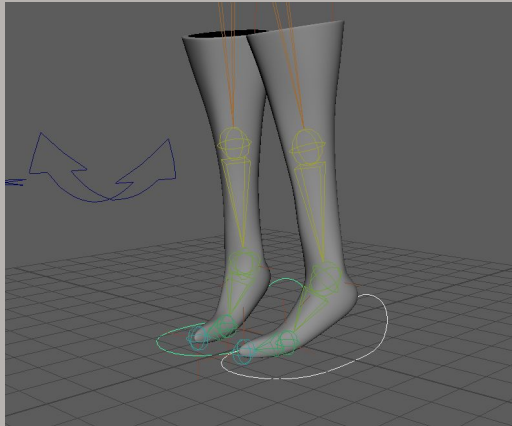
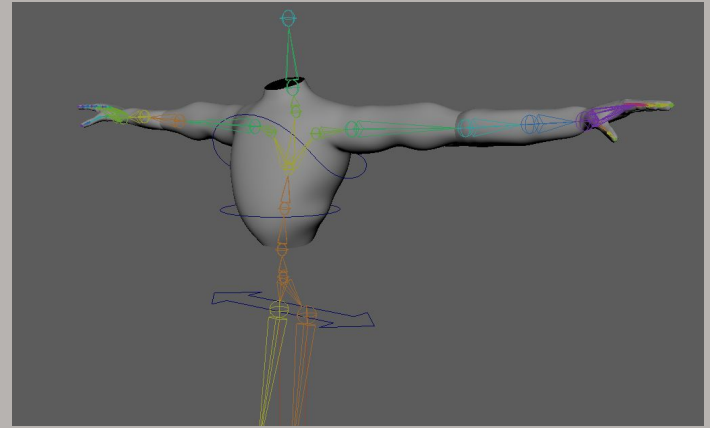
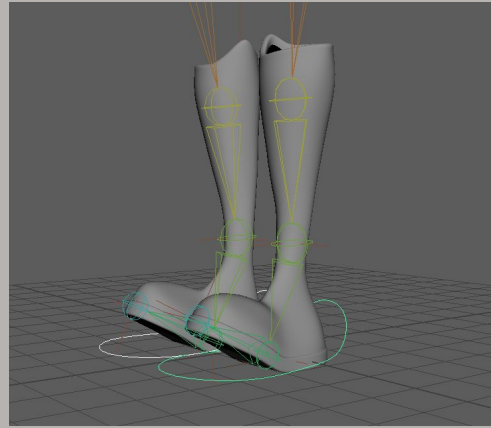
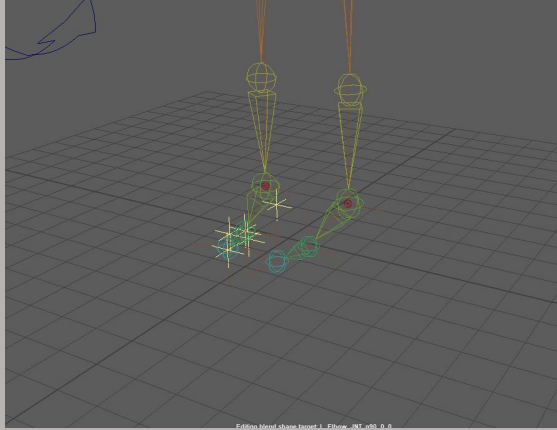
# Samurai Character: Blend Shapes



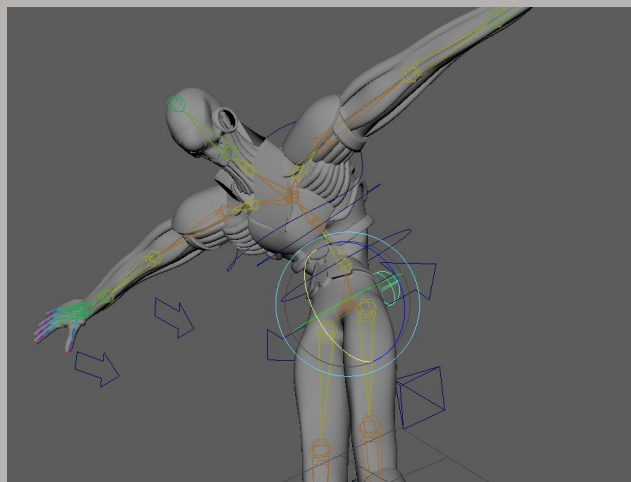
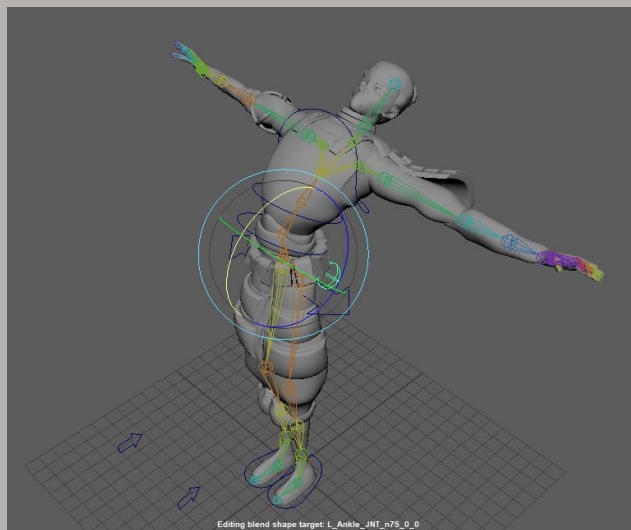
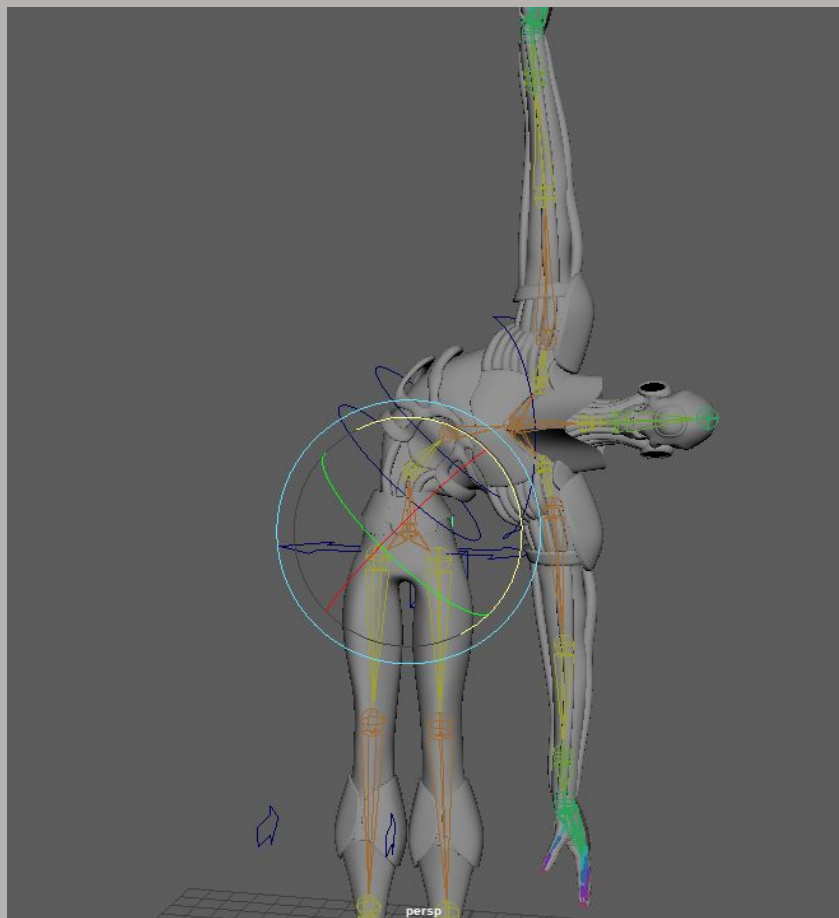
# Cyberpunk Character: Blend Shapes



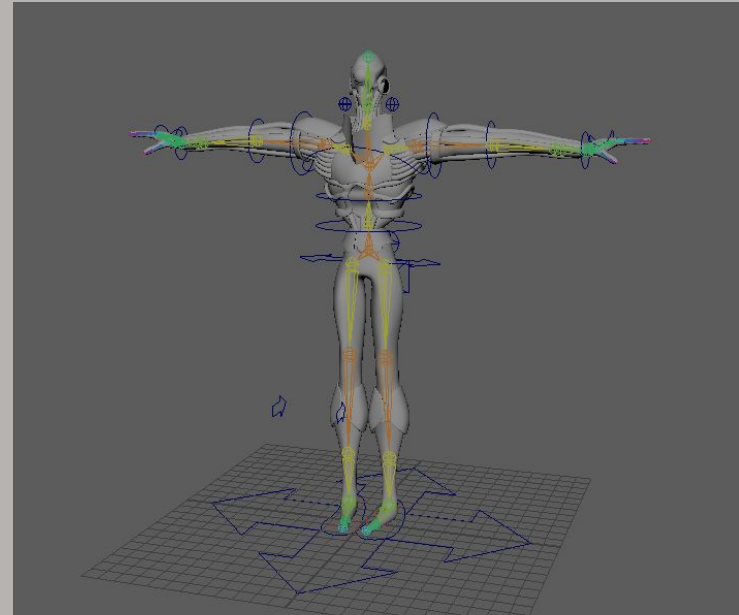
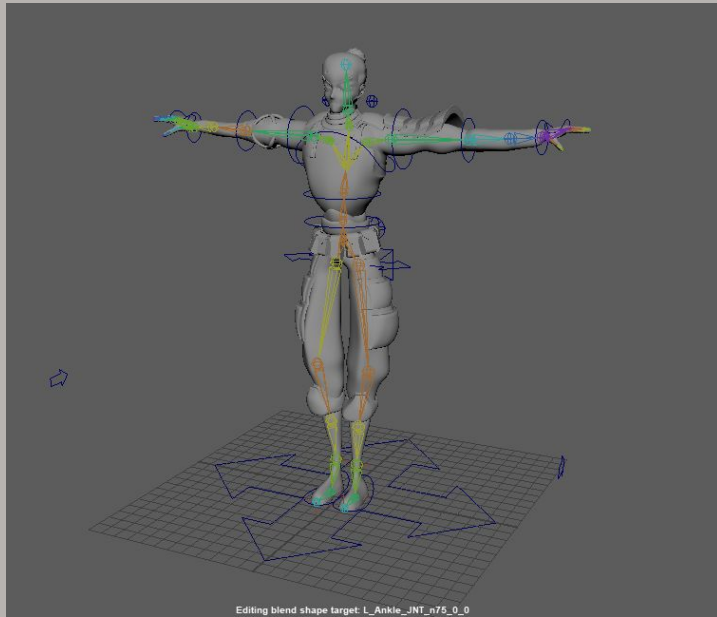
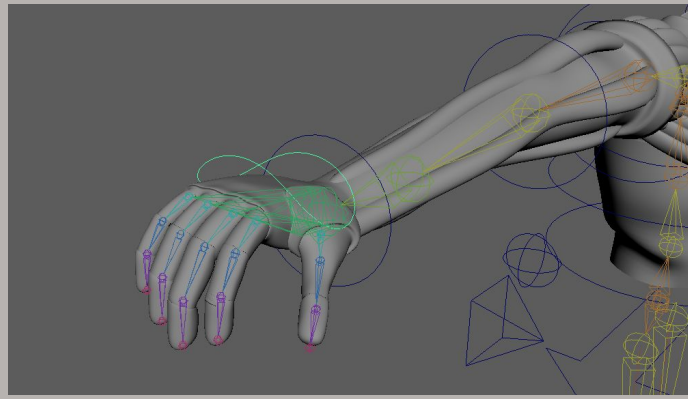
# Rig Controls



# Rig Controls

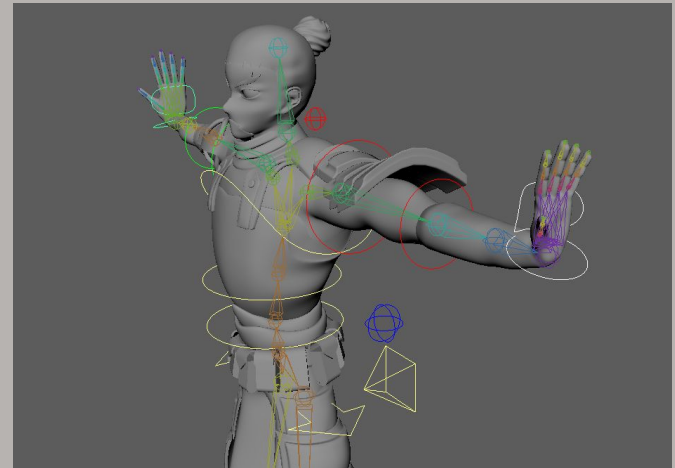
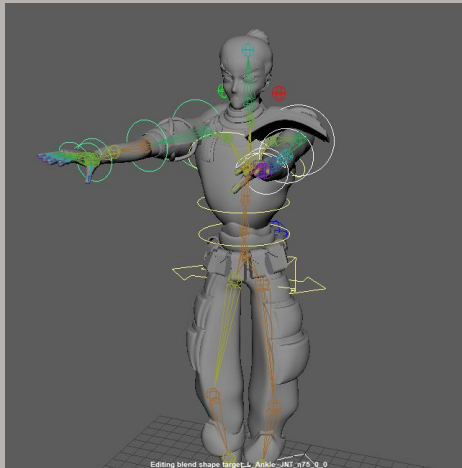
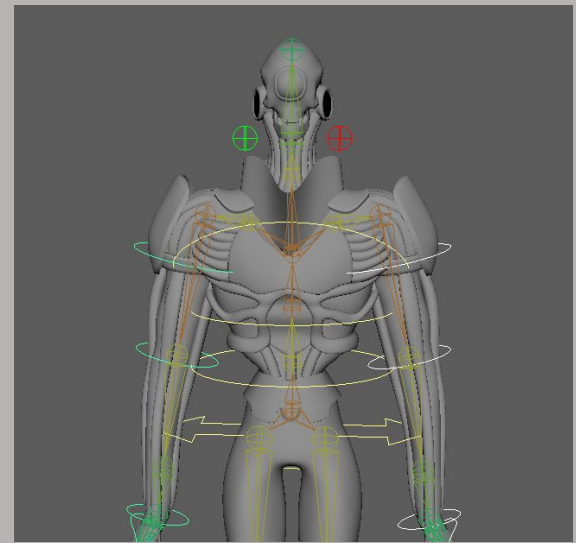
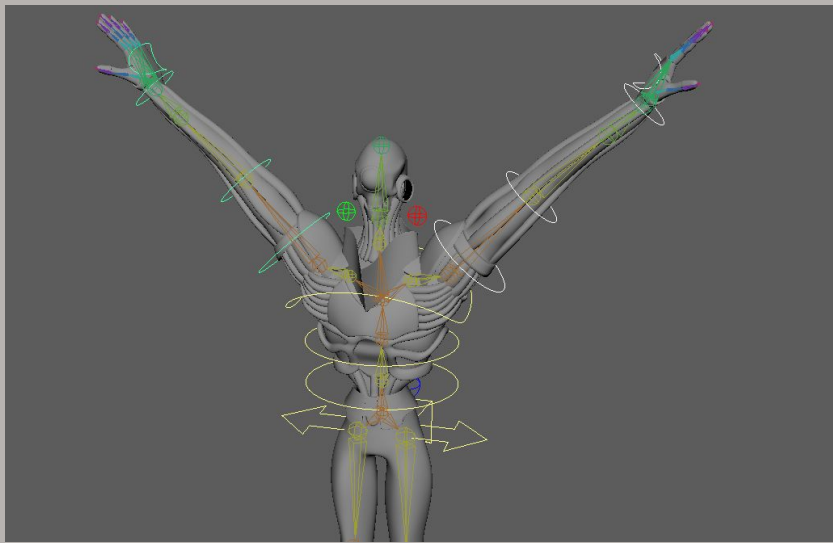


# Rig Controls

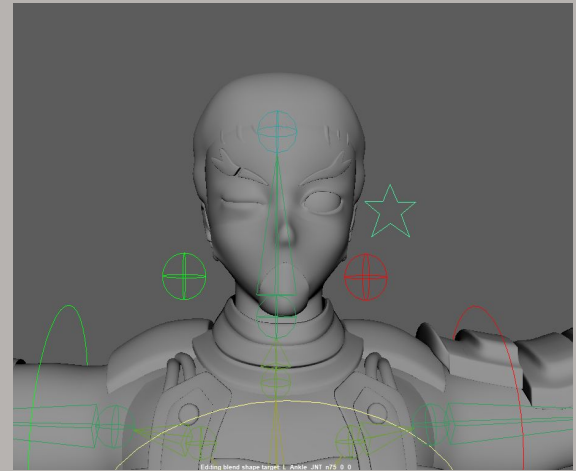
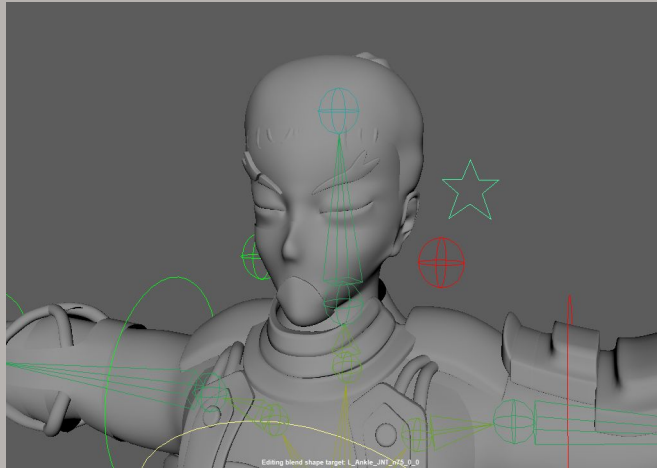
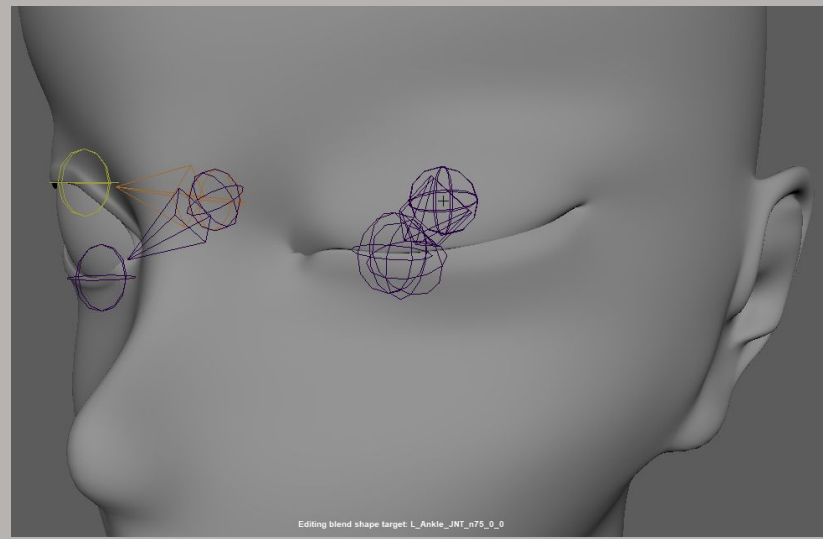
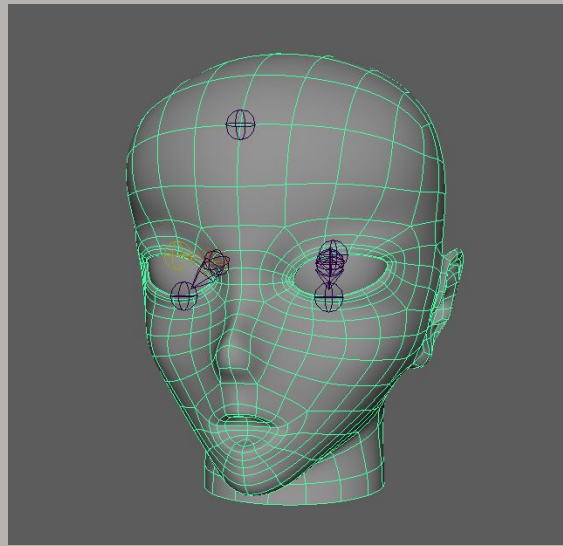




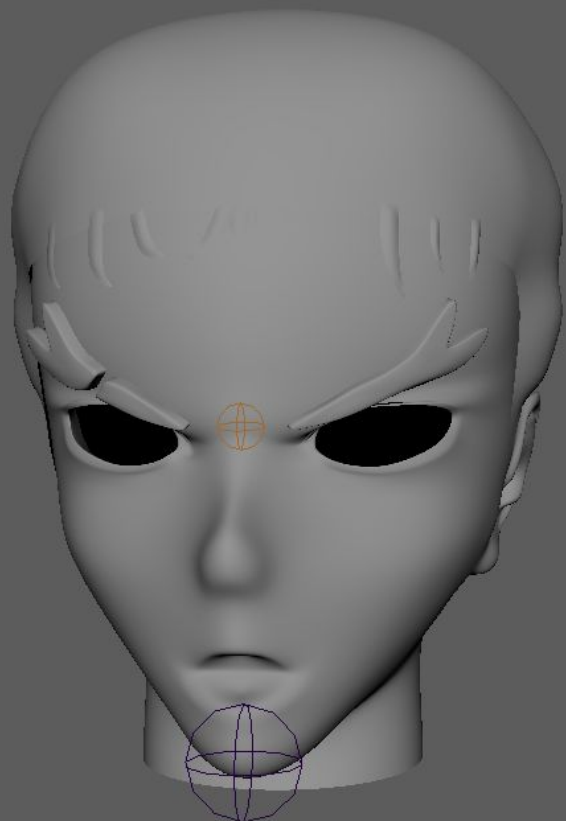
# Rig Controls



# Rig Controls



# Rig Controls



Editing blend shape target: L\_Ankle\_JNT\_n75\_0\_0



Editing blend shape target: L\_Ankle\_INT\_n75\_0\_0









