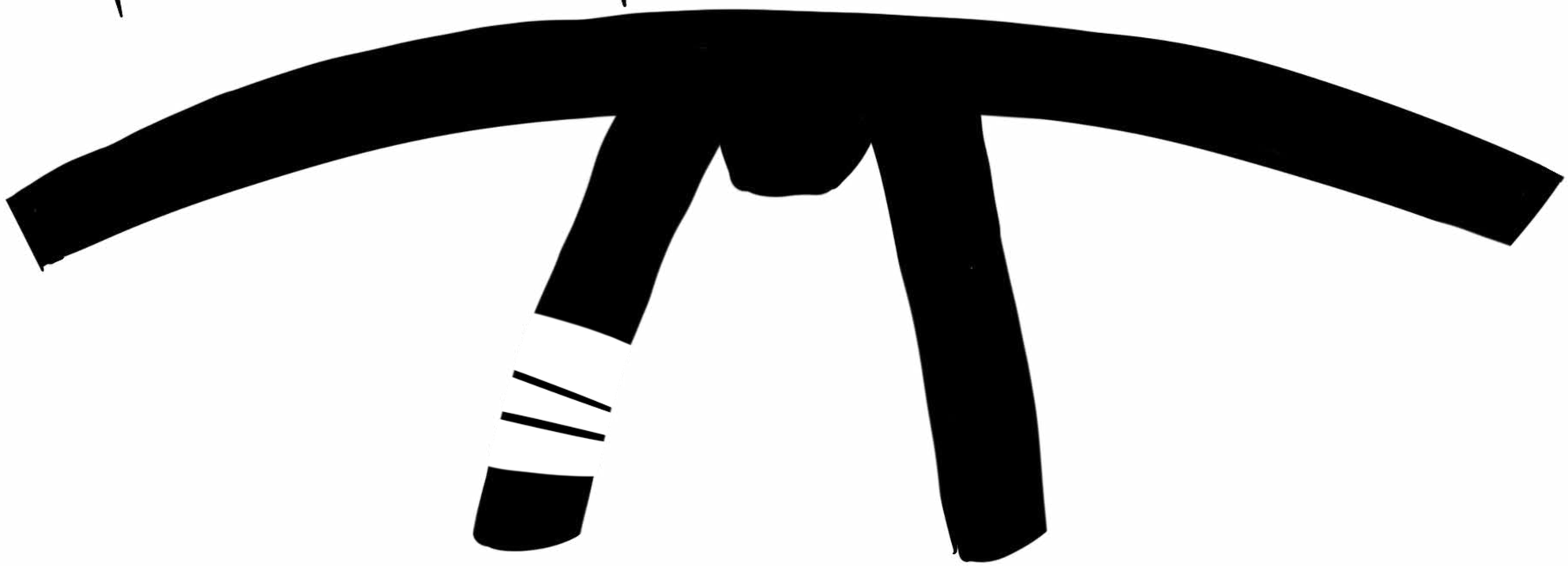
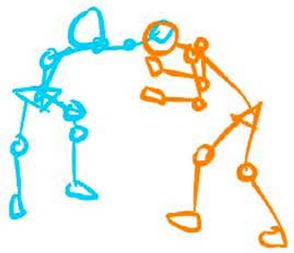
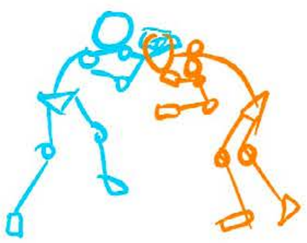
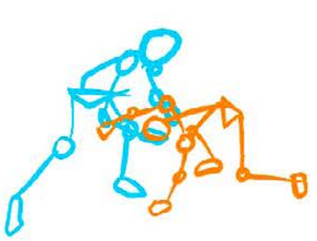
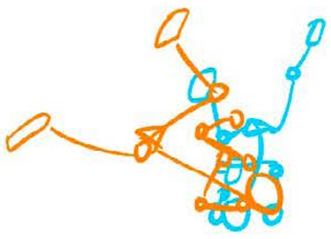
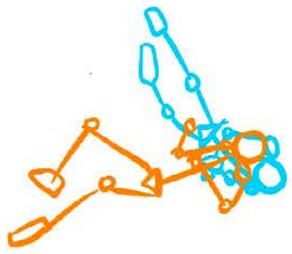
The Gentle Art

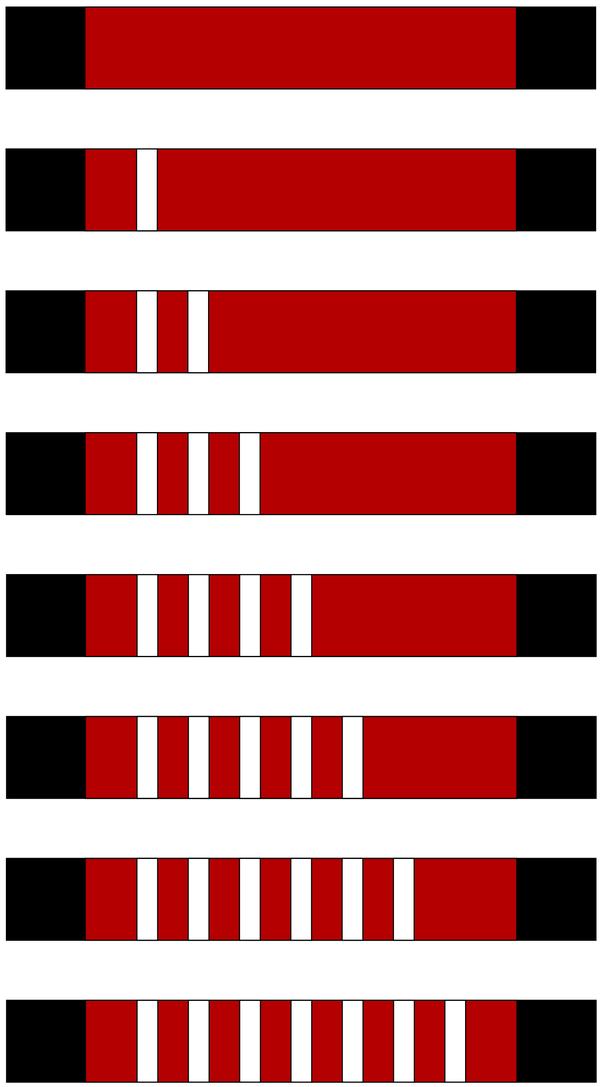


CONTENTS

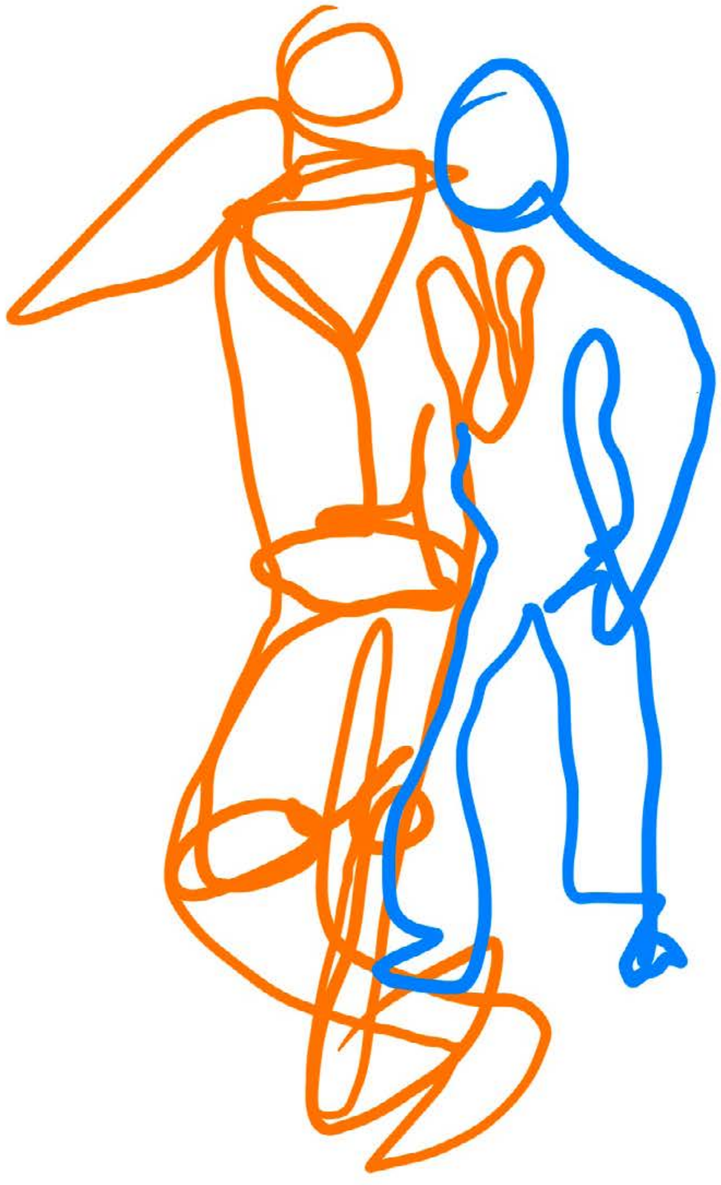
Introduction
2D Line/animation
Movement Capture
Considerations
3D modelling
Rendered series
Abstract modelling
Conclusion

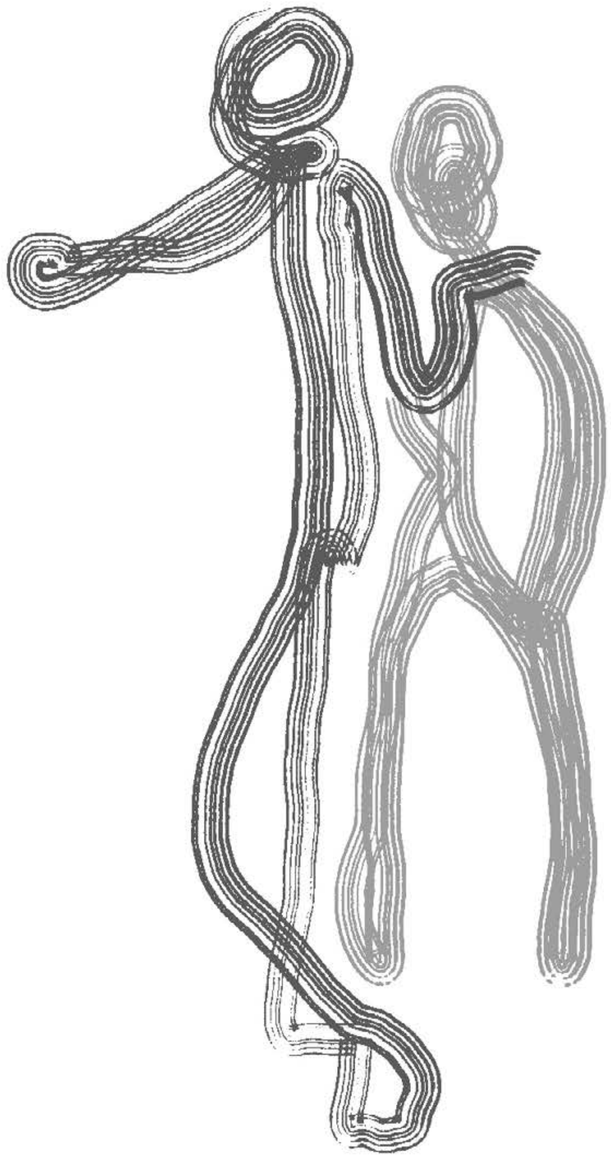


Introduction

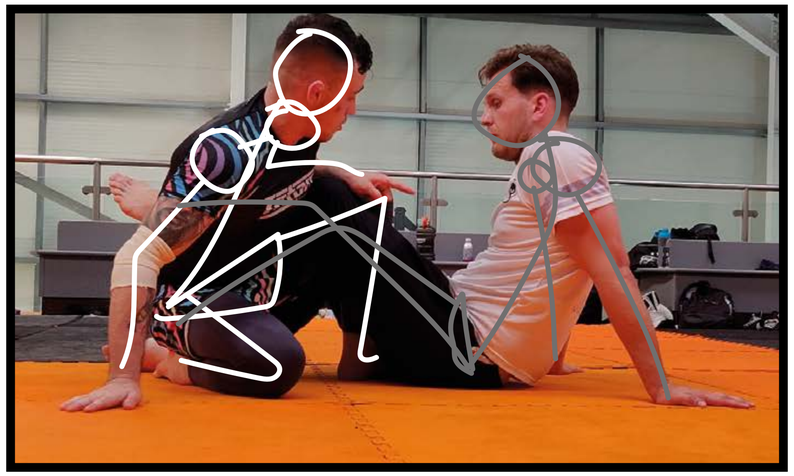
This project attempts to communicate the complex forms of movement in the martial art, Brazillian Jiu-Jitsu.

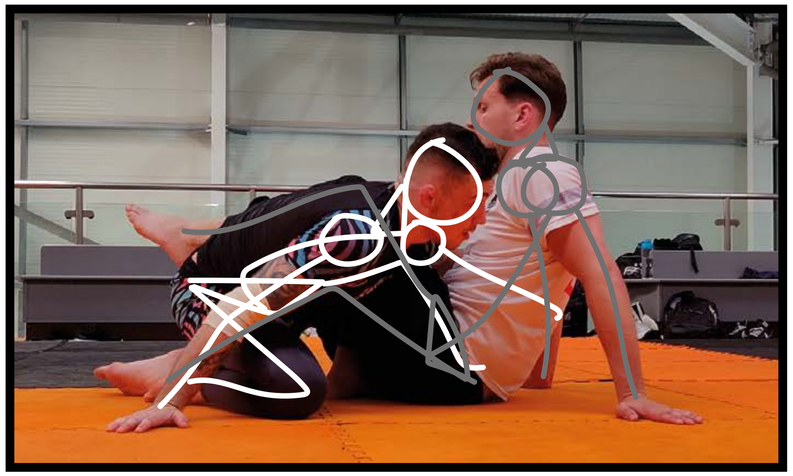
The aims for this project are to convey these movements to anyone unfamiliar with BJJ or martial arts in general with the hopes of them understanding and appreciating the art.

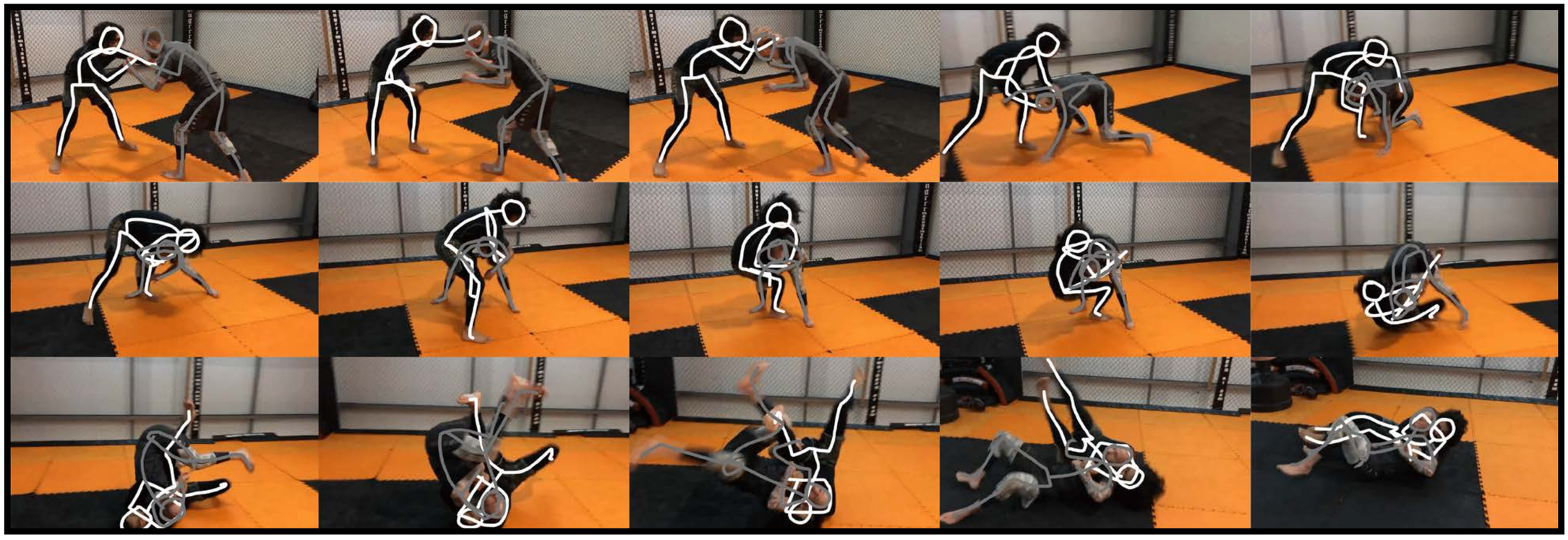




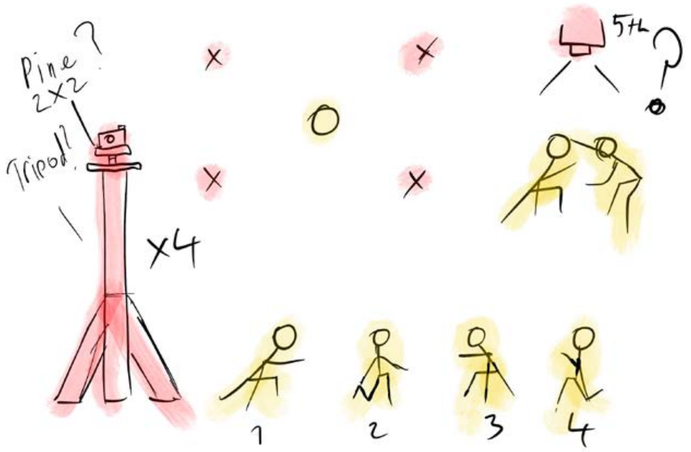
I wanted to experiment with 2D line and animation with the goal to better understand the movements of Jiu-Jitsu.
I took some still images from a video and tried to identify the important key-frames.

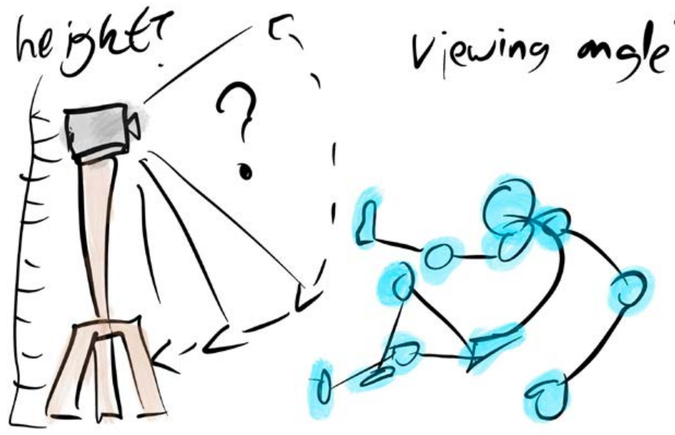


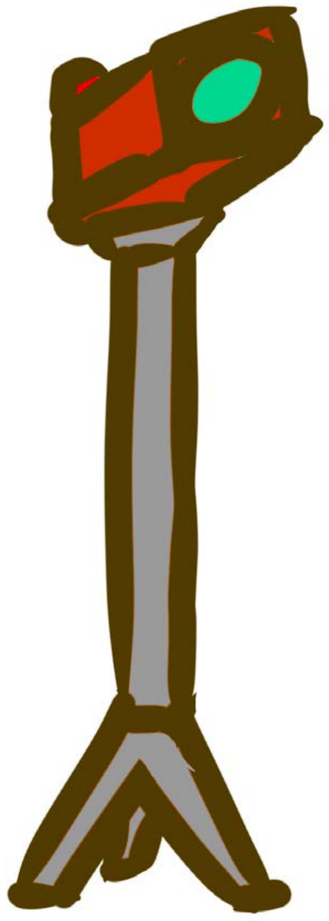


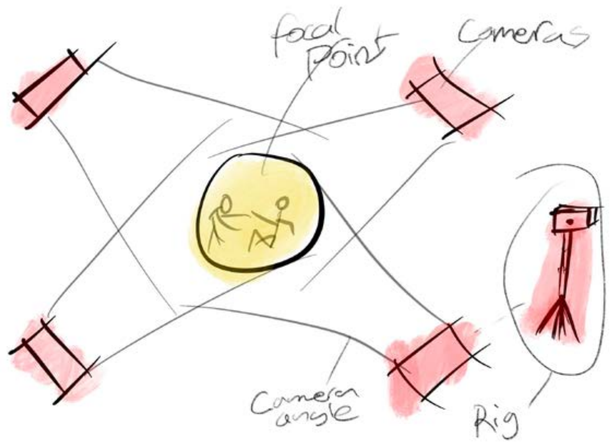


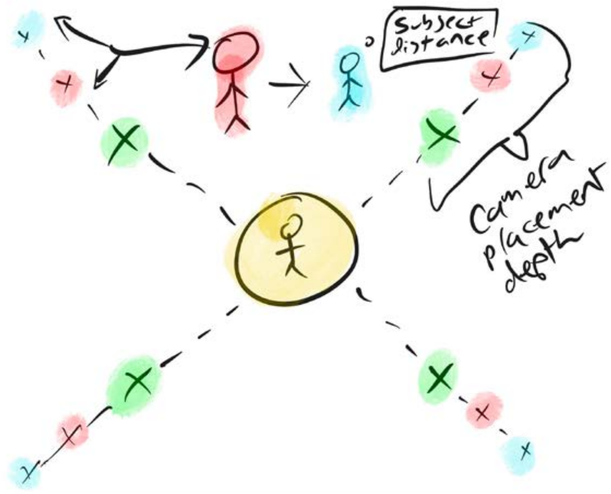
Exploring this at length I made an animation that not only helped me understand more about the movement but also what issues might present when transitioning to 3D modelling.





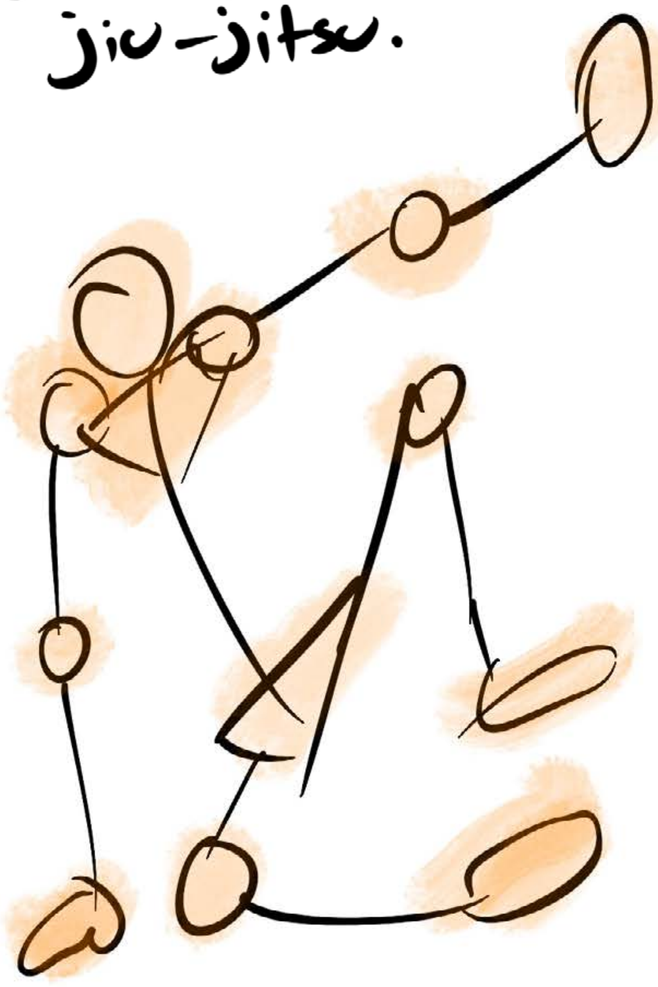






To produce 3D models I required more refrence footage, I opted to film the movements I needed from 4 different camera angles. I heavily considered distance, angles and orientation to acquire the most optimal results.

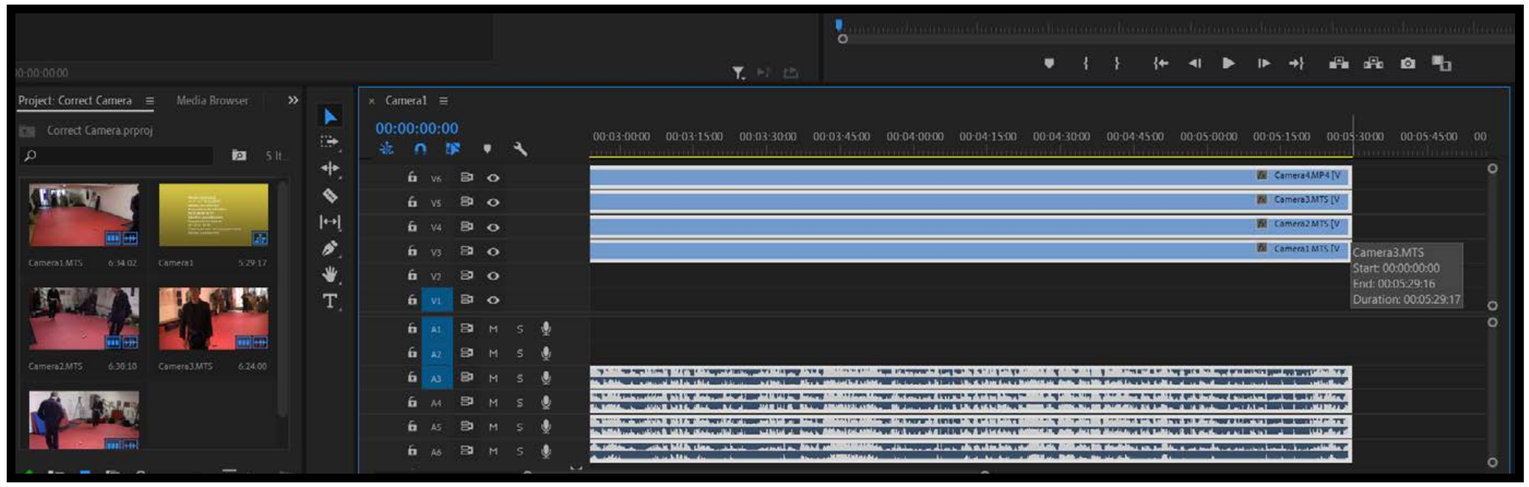
The choreography of the movements was incredibly important. I needed to showcase a carefully curated movement that would illustrate the composition of jiu-jitsu.



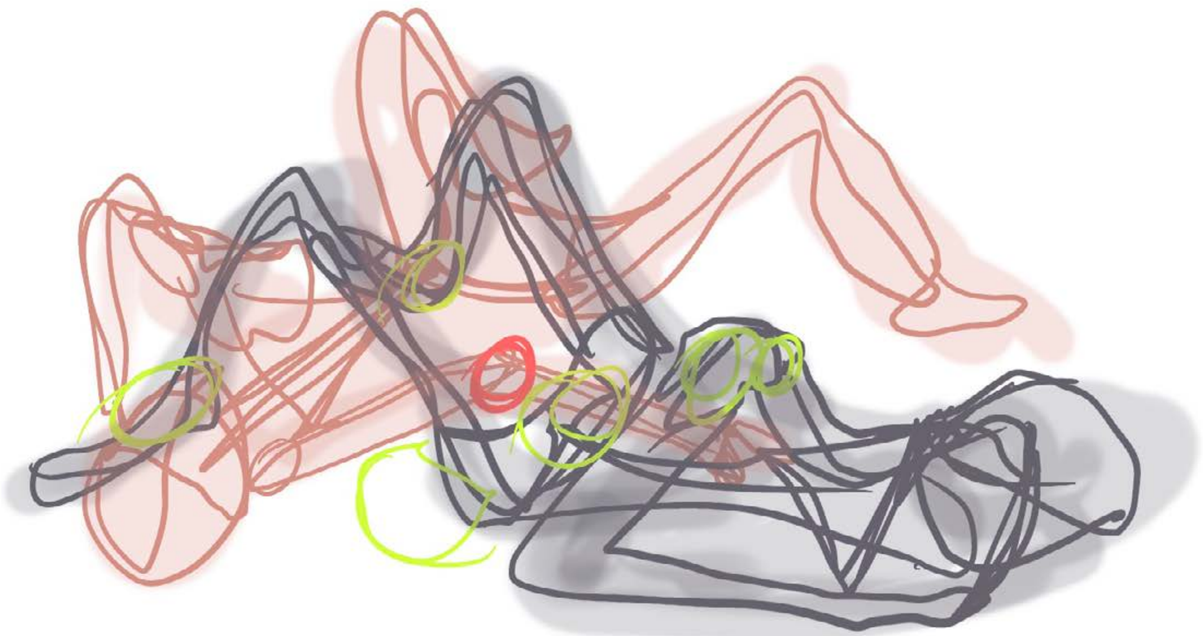
Choreography

- Sweep
- Guard pass
- Submission

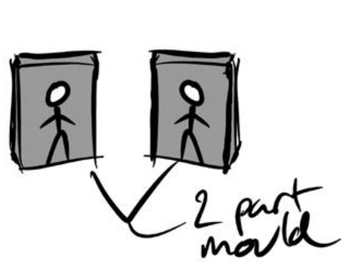
Using Premiere Pro I synced all the footage from each camera allowing me to easily select or reference with all 4 angles.

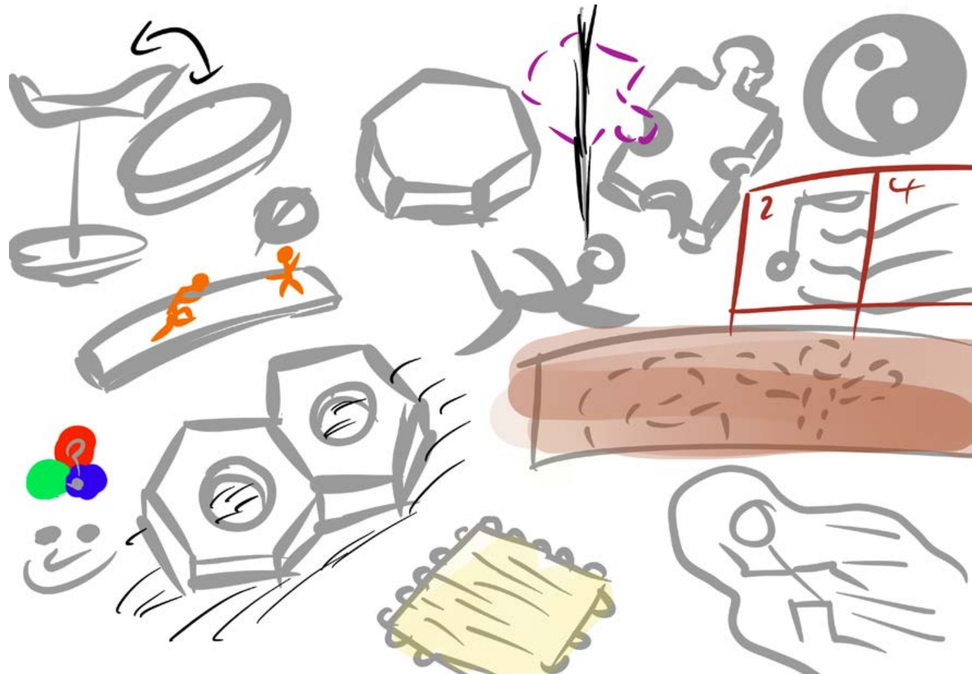


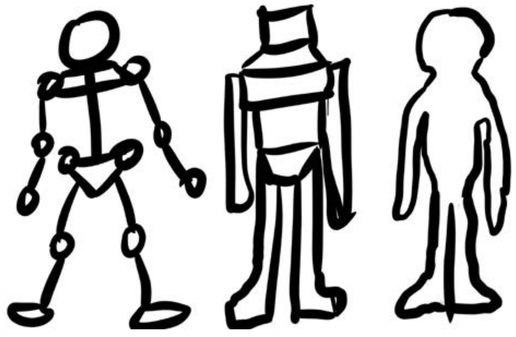
I made many considerations regarding materials, a base, model shape and contextual information. My focus was to only include what was relevant.



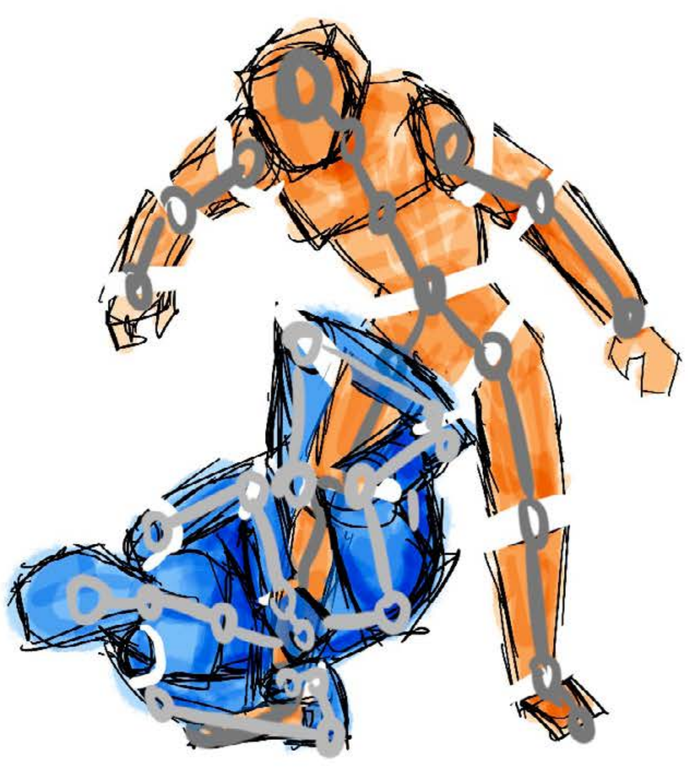
Point of potential breakage

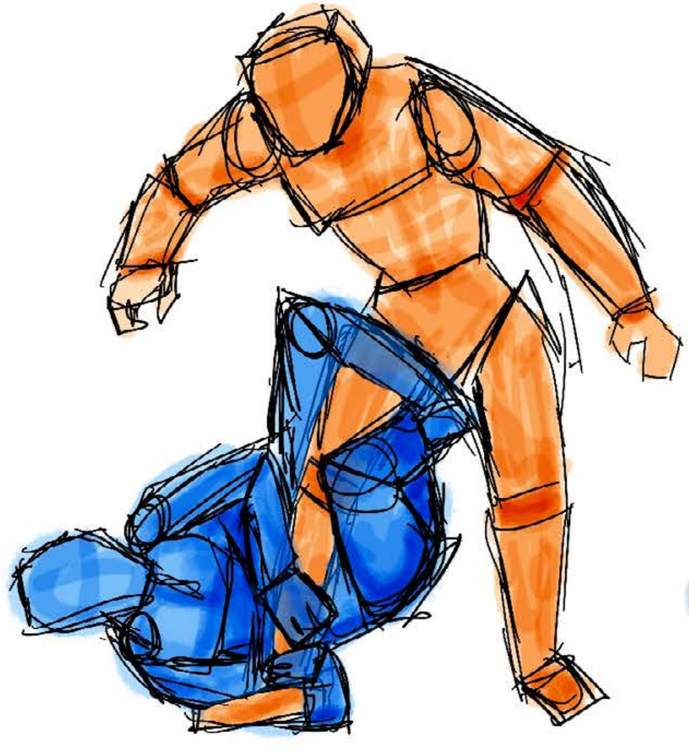


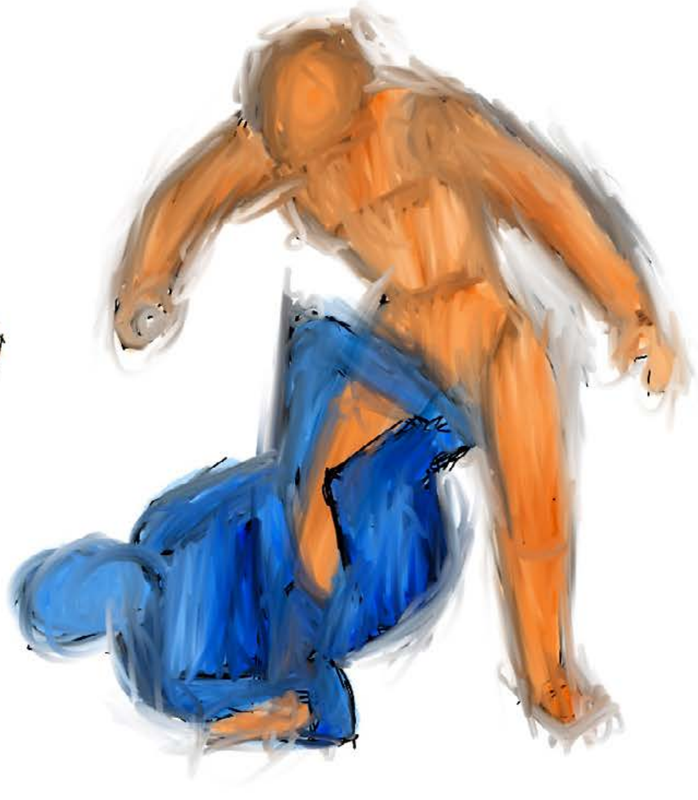


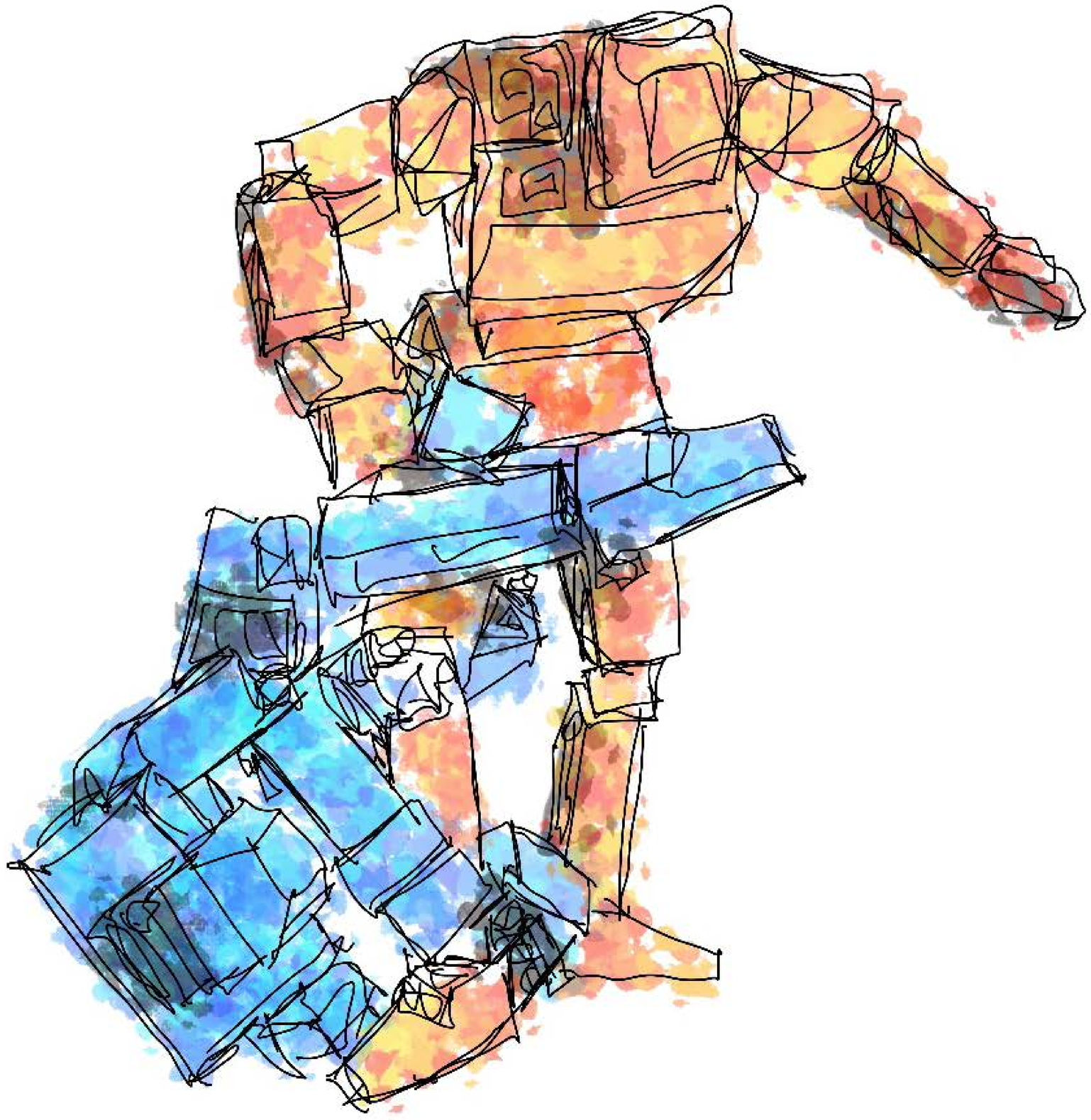


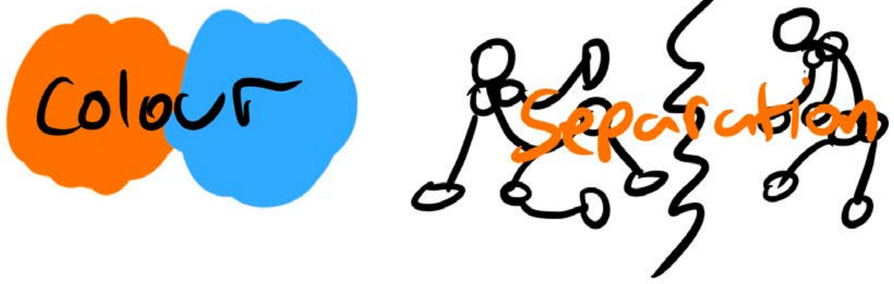
Thinking of physical outcomes, thought and experimentation must be made in regards to the most effective communication. Wether it be conceptual or legibility.





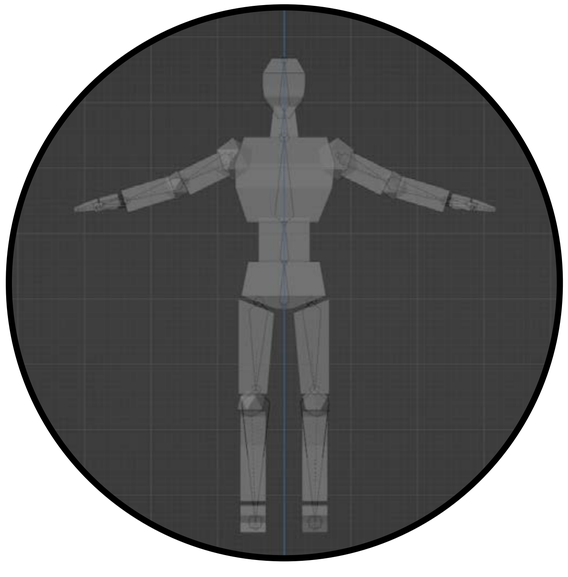


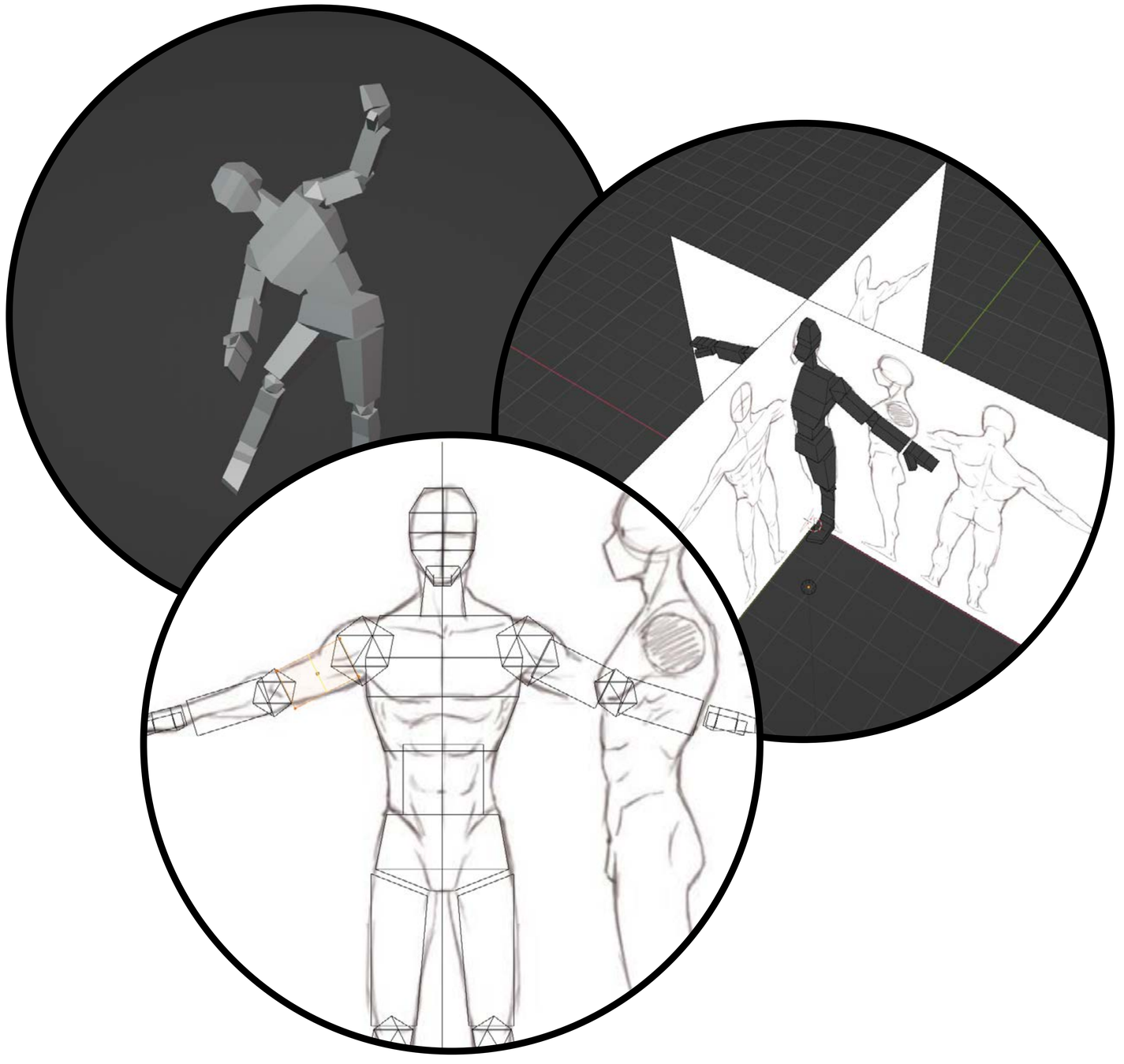


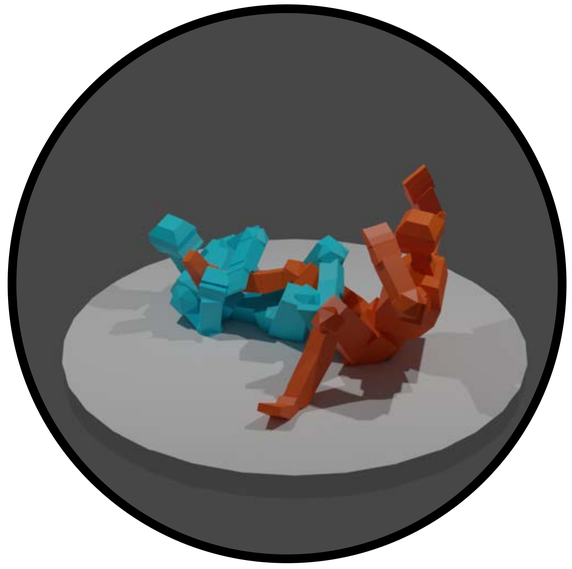
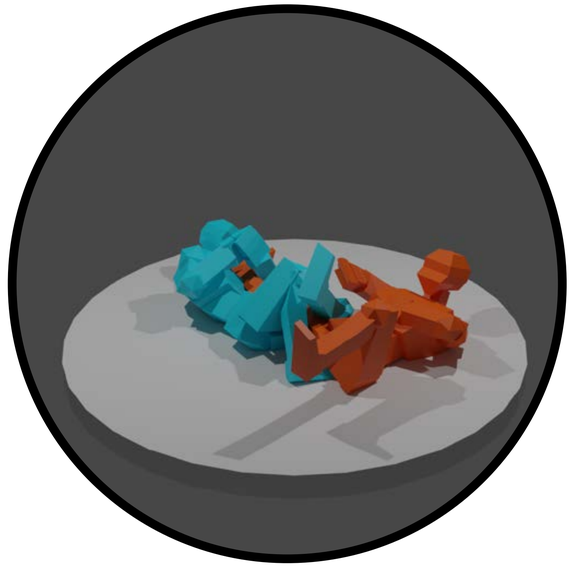


Considering legibility of 3D outcomes I have to think about how I distinguish both figures. Many alterations can be made dependant on the medium.

I used Blender 3D software for the creation and manipulation for all my models.
I built up low-poly armatures and posed them relating to my reference footage.

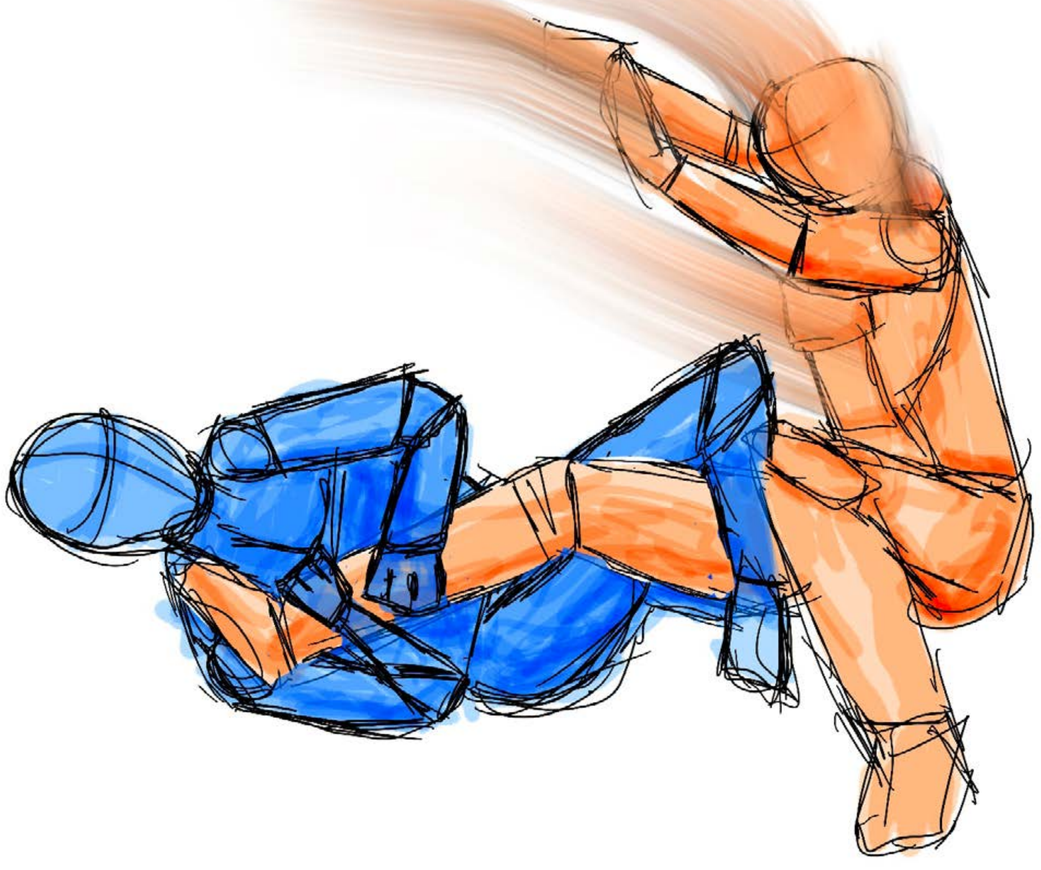




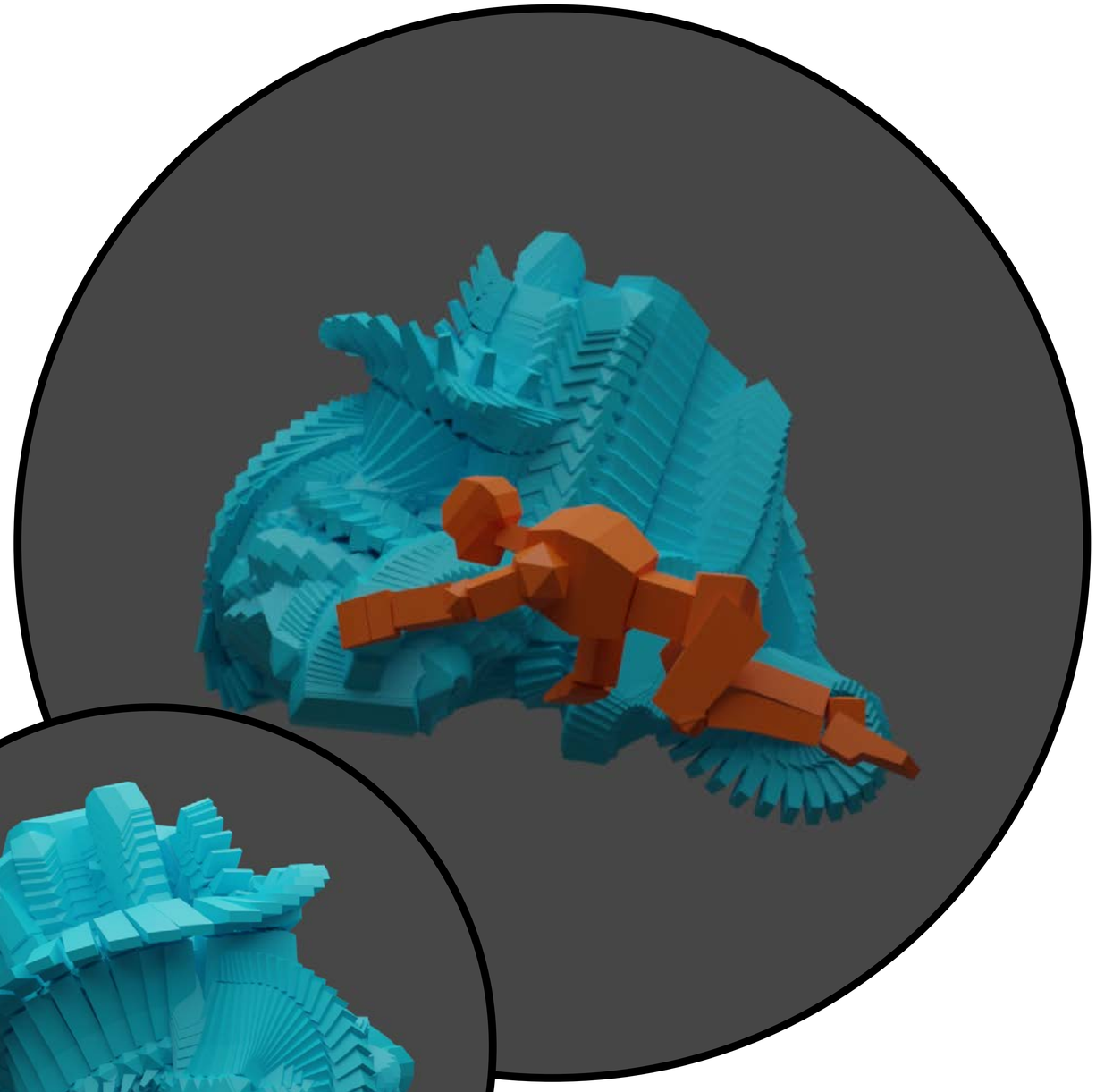
After my initial series of 3D models, I wanted to experiment with how I could translate the idea of movement in a more abstract fashion.

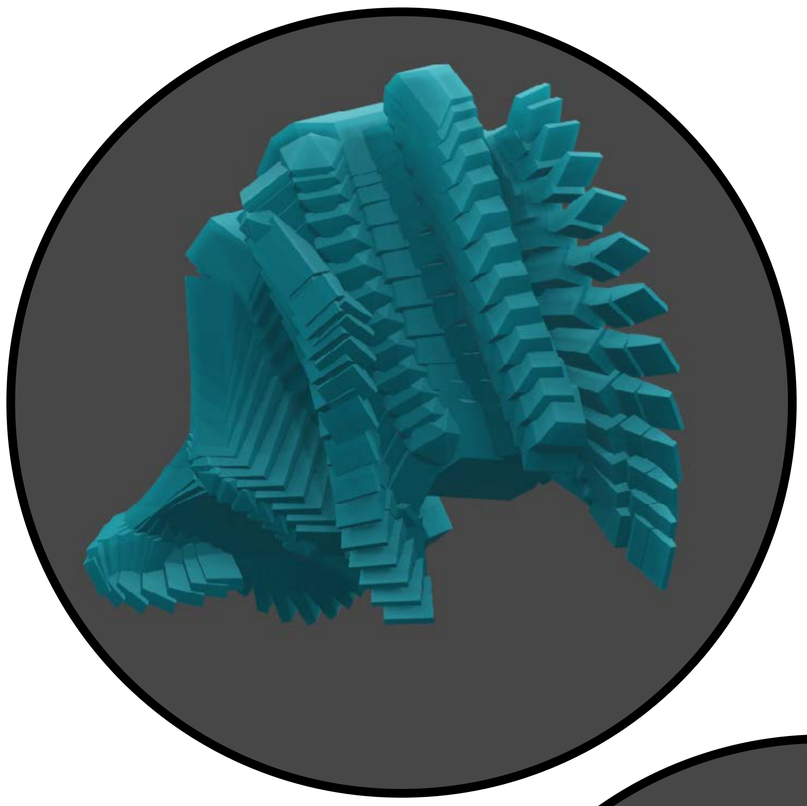
The idea was to be able to still understand the movement while also trying to encapsulate more movement in a single model.

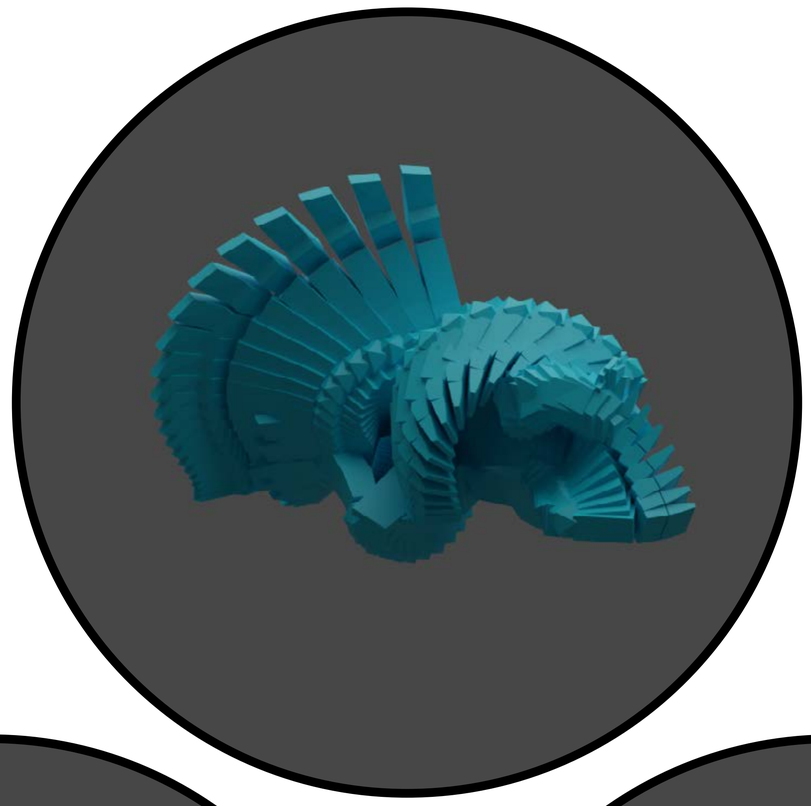


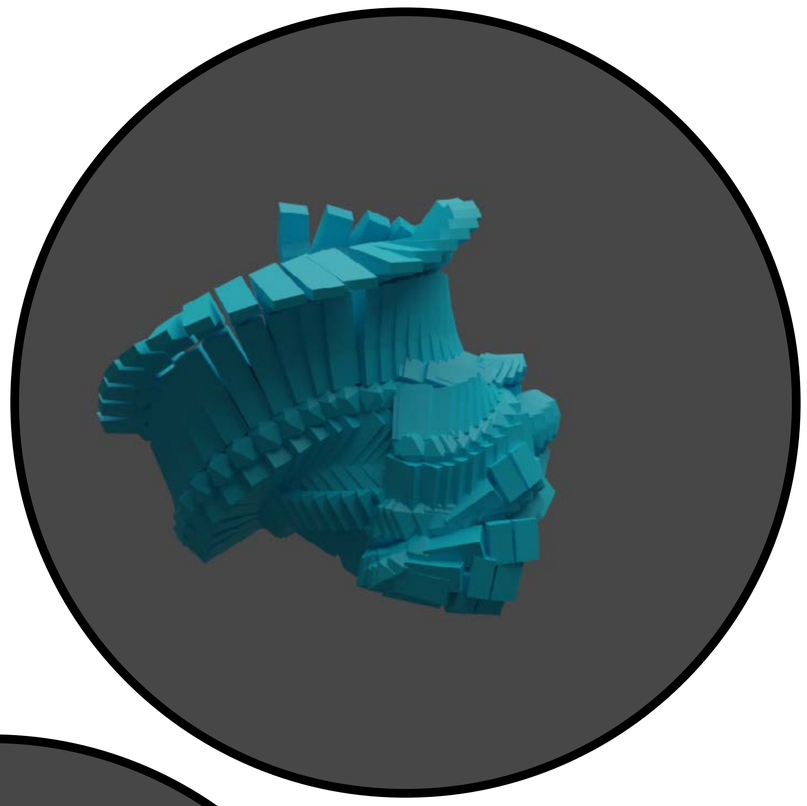
I used all the models from my first series as key frames for an animation which follows through the whole movement.

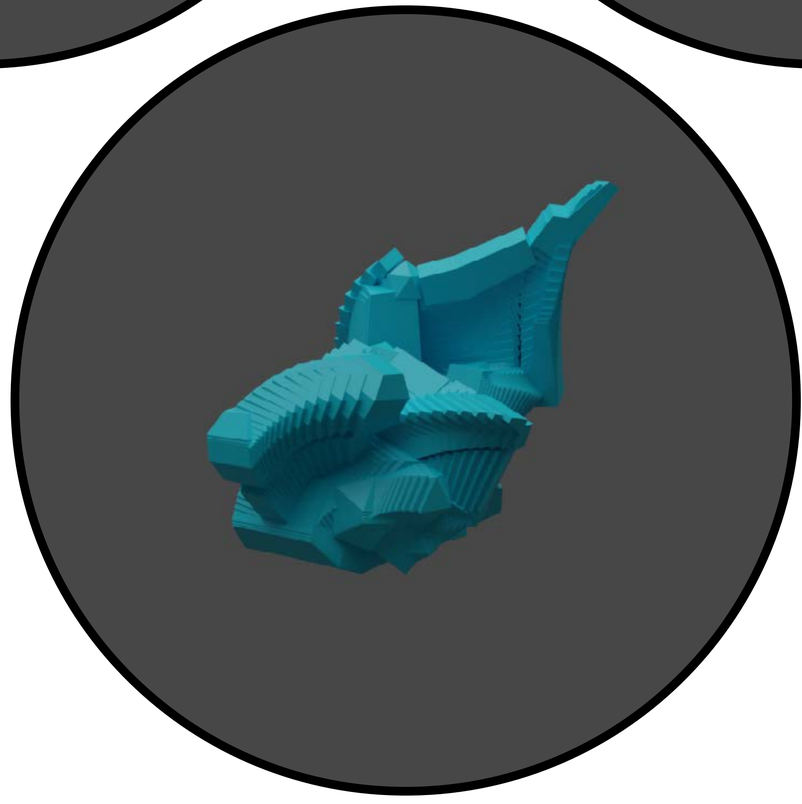
I then combined every frame into one model, showing the animated armature in front of the solid frames.

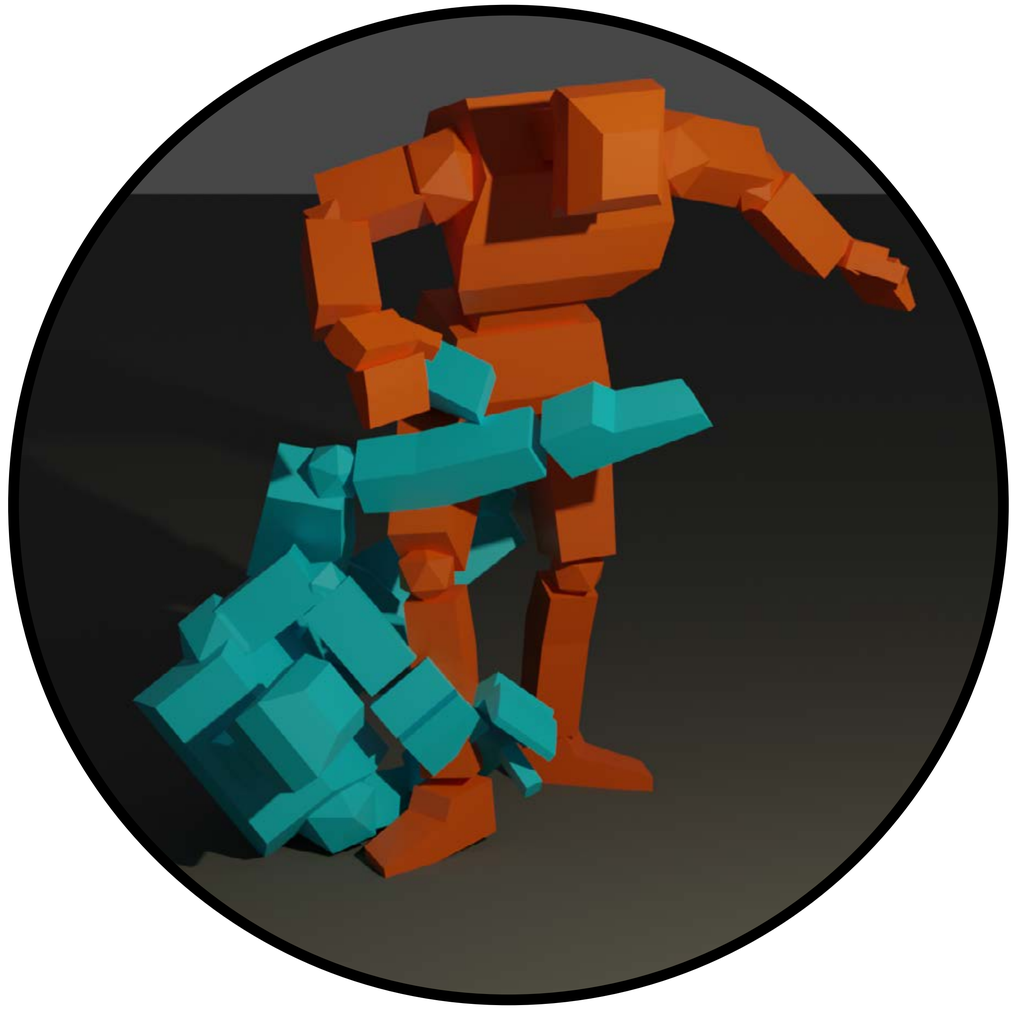










CONCLUSION

This project was process heavy and challenged my conceptual thinking. I believe that I captured what I set out to do while also producing accurate and interesting models. The movements and process are easily ascertained and are a nice gateway into loving and understanding the beauty of Jiu-Jitsu.