

MA 3D COMPUTER ANIMATION  
TERM 1  
ANTONIO MALDONADO III

BLOG LINK: [HTTPS://AMALDONADOIII.MYBLOG.ARTS.AC.UK/](https://amaldonadoiii.myblog.arts.ac.uk/)

# ANIMATION SHOWREEL

ANTONIO MALDONADO III'S MA 3D  
COMPUTER ANIMATION SHOWREEL - TERM 1:

[HTTPS://VIMEO.COM/661621933](https://vimeo.com/661621933)

# BLOG POSTS

12 Principles of Animation Blog Link: <https://amaldonadoiii.myblog.arts.ac.uk/2021/10/14/week-one-intro-to-3d-fundamentals/>

Good & Bad Animation Blog Link: <https://amaldonadoiii.myblog.arts.ac.uk/2021/10/17/week-two-good-and-bad-animation/>

Bouncing Ball Blog Link: <https://amaldonadoiii.myblog.arts.ac.uk/2021/10/20/week-two-bouncing-ball/>

Obstacle Course Ball Blog Link: <https://amaldonadoiii.myblog.arts.ac.uk/2021/10/21/week-three-ball-obstacle-course-attempt-1/>

Character Poses 1 Blog Link: <https://amaldonadoiii.myblog.arts.ac.uk/2021/10/22/week-three-character-poses/>

Hopping Fox Blog Link: <https://amaldonadoiii.myblog.arts.ac.uk/2021/10/22/week-three-hopping-ball/>

Walk Cycle Blog Link: <https://amaldonadoiii.myblog.arts.ac.uk/2021/10/29/walk-cycle-animation/>

Rotoscope Character Anim Attempt 1 Blog Link: <https://amaldonadoiii.myblog.arts.ac.uk/2021/11/10/rotoscope-character-animation/>

Rotoscope Character Anim Attempt 2 Blog Link: <https://amaldonadoiii.myblog.arts.ac.uk/2021/11/12/rotoscope-character-animation-attempt-2/>

Character Poses Attempt 2 Blog Link: <https://amaldonadoiii.myblog.arts.ac.uk/2021/12/01/character-poses-attempt-2/>

Advanced Body Mechanics Blog Link: <https://amaldonadoiii.myblog.arts.ac.uk/2022/01/02/advanced-body-mechanics/>

Lip Sync Blog Link: <https://amaldonadoiii.myblog.arts.ac.uk/2022/01/02/lip-sync/>

# 12 PRINCIPLES OF ANIMATION

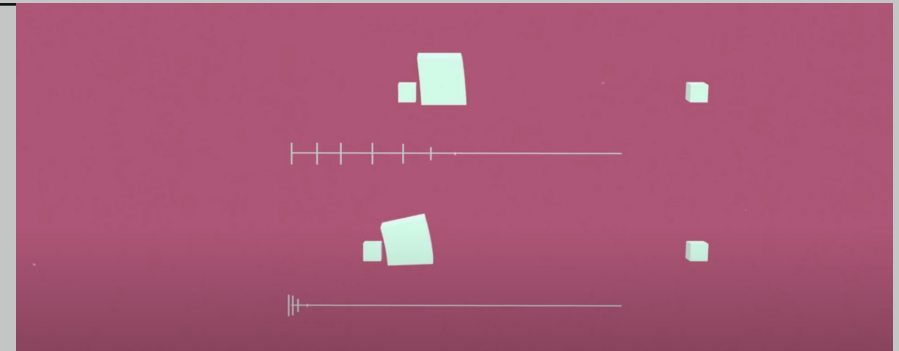
The '12 principles of animation' is almost the key essence of life within the animation world. Almost everything seen in a single cell or frame follows one of the key '12 principles of animation'. Understanding this fundamental value of animation allows you to almost animate anything, from human beings, dinosaurs, aliens, trees or even cubes. All dynamic objects or creatures follow the same 12 principles and can be exploited around them, becoming far more exaggerated or realistic to develop a personality.

## 12 Principles of Animation



- Appeal
- Staging
- Arcs
- Timing
- Anticipation
- Solid Drawing
- Exaggeration
- Secondary Action
- Slow in & Slow Out
- Squash & Stretch
- Straight Ahead & Pose to Pose
- Overlap & Follow Through

To be able to visibly show the '12 principles of animation' is vital in becoming an animator or scene director (but not limited to). So vital, where an animation job interviews you may be asked to create something as cliché as a bouncing ball animation to distinguish your personality in the animating world. Why a bouncing ball? Well, that is because a bouncing ball follows all '12 principles of animation'. Something as simple as a sphere (or cube, or any other shape) can easily apply these principles and be used to tell a vivid story.



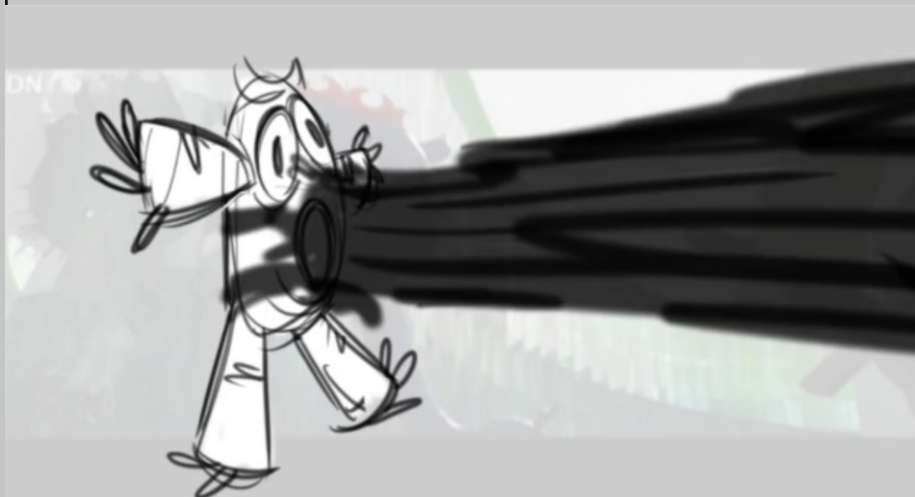
Video Reference explaining 12 Principles of Animation: <https://youtu.be/yiGY0qiy8fY>

As seen from the video above, a simple shape can be used to tell a range of on-screen dialogue without the use of character voice or facial expression. Even though a simple shape doing a simple action is quite simple at first glance, we actually are crossing multiple actions off such as Spacing, Weight, Arcs, Squash & Stretch (refer to the first image). To learn the essence of animation, whether 2D or 3D, it's almost a necessity to learn how a ball bounces. So much so, that even animators at Disney and other big studios use balls to block out their animations for feature films. As characters will be using the same functions of either running, jumping, fighting, etc... we'll be able to distinguish one of each principle for every action. An example of this can be seen in the video below, where Big Hero 6 (animated film) uses a ball around the 46-second mark to block out the scene ahead before jumping the gun and using a live character.

# 12 PRINCIPLES OF ANIMATION

To sum up the overall reason the '12 principles of animation' within a bouncing ball can be quite important is that the bouncing ball translates into advanced character animation. The example above shows that no matter how professional someone's experience may be, relying on the basic fundamentals can create complex actions that can grasp the audience in front of the screen. Furthermore, scene block-outs using rough shapes help reach deadlines or even to help you have a better idea of what the screen composition may be.

If you only have 5 hours to provide a first draft of an animated film scene, it would be much easier to provide a rough block-out of a simple shape doing the required actions for the scene, instead of a fully rigged character and trying to move an entire skeleton that helps depict the scene. Overall, there is nothing other than benefits from mastering the '12 principles of animation' one way or another they shall find a way into the animation.



Video Reference 'Big Hero 6 Shot Breakdown': <https://vimeo.com/121632004>

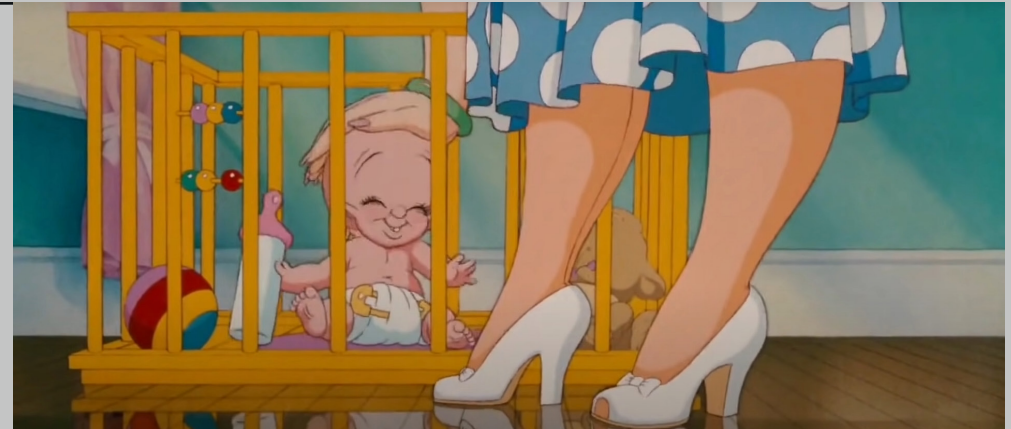
# GOOD & BAD ANIMATION

Gantz:O is a 3D live-action film adaptation based on the hit Manga & Anime by the name of Gantz. The Japanese film animation uses Hollywood live motion tracking suits as well as raw 3D animation to develop its scenes within the movies and explores multiple ranges of character animation, ranging from realistic, to exaggerated cartoon style as well as fantasy-type movement.



Video Reference 'GANTZ: O TRAILER': <https://youtu.be/r37ARGRJC-k>

A form of good animation within the 12 principles of animation is to be able to apply a vast range of animation styles into one with a seamless transition that does not become an eyesore to the viewer. There are multiple fight scenes and travel scenes that you can see have fluid animation that show that a well-thought-out process has been done to achieve this effect. Gantz:O may not be of Disney, Pixar or Dreamworks standard, but the Japanese animation has developed a way of staying within these 12 principles of animation previously mentioned and distorting them to a point where different creatures have different animation styles.

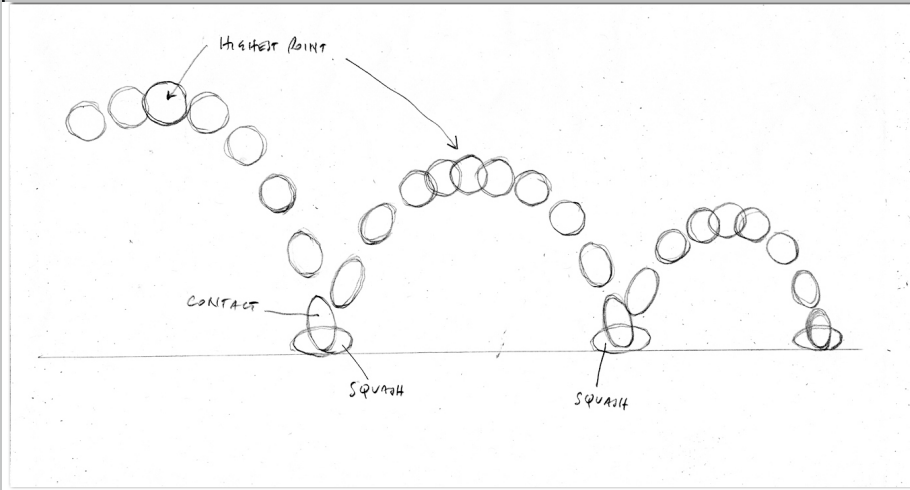


Video Reference 'Who Framed Roger Rabbit': <https://youtu.be/gpDaNqSXxp0>

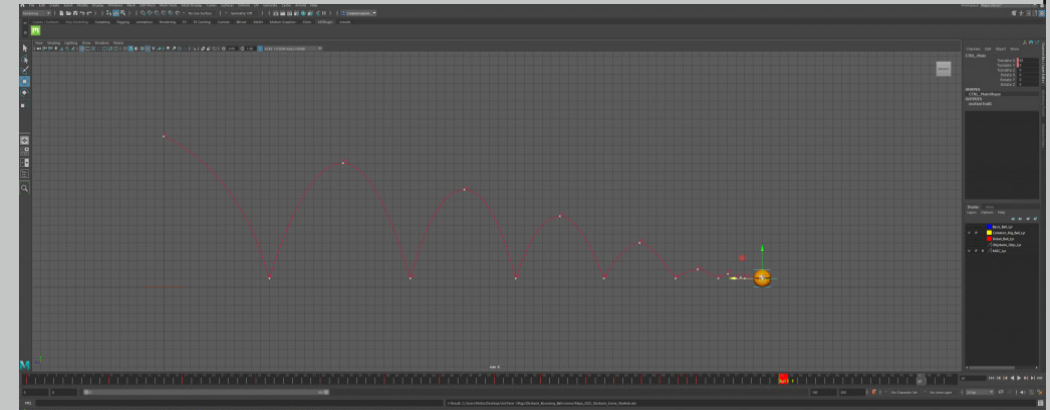
An example of blending multiple styles of animation and movement together can be the classic 'Who Framed Rodger Rabbit' from 1988, blending real live-action with animation for an effect that makes the cartoon animation feel as if it has ventured into the real world. Although Gantz:O does not necessarily cross the real with the fake, we have a sense of realism within human-based characters due to the motion-tracked animation providing natural movement. However, the cross between animation is felt when we see fictitious monsters that break the boundaries of reality enter the film, and bring their own idea of the 12 principles.

# BOUNCING BALL

So to begin, I believe it is quite useful to create a bounce guide sheet so I have a rough estimate of how I want the ball to bounce and the distance it will travel. So I took a screenshot of the model and photoshopped a simple trajectory of what I wanted to accomplish.



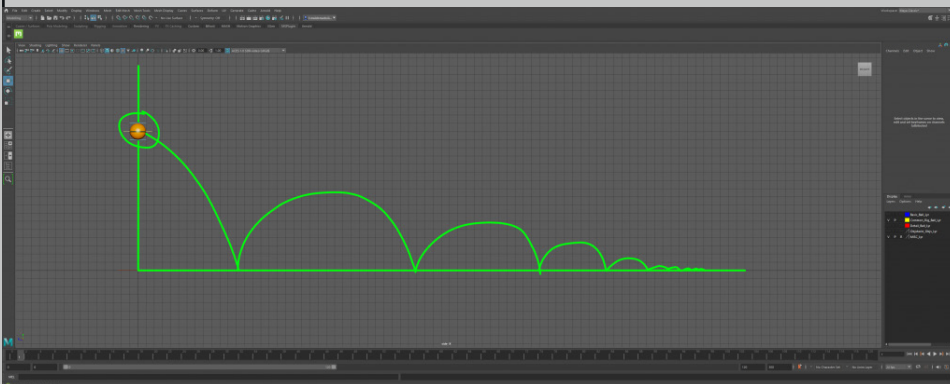
This week I have been tasked with a goal to begin animating a bouncing ball. As discussed in a previous post, the bouncing ball is a great way to display the '12 Principles of Animation'. I've had 3D experience before, but have never used AutoDesk Maya, nor have ever animated a model before. Having never done animation before, the bouncing ball will prove quite useful in learning the fundamentals and building useful habitual skills that will carry over into the working industry of animation or 3D as a whole.



After creating the positioning of the ball and animating a keyframe, my motion trail has a nice uniform bounce until the very end, which does not look like it has a realistic finish, but my primary focus was to learn the practice of getting the bounce, squash and stretch as well as timing down as well as possible. After seeing the ball bounce along the trajectory with a nice even timing between time spent in the air, and time on the ground, it felt like a great start and a decent appeal.

Bouncing Ball Development 1: <https://youtu.be/CP6CZRtv4LA>

After I had finished my positional bouncing, it was time to add rotation. Between each keyframe, I had made the ball rotate 90-degrees clockwise for a realistic direction and for a sense of direction that the ball is bouncing in. Naturally, a ball would not start or finish on a specific 90-degree angle, nor would it bounce so precisely between bounces. But as mentioned before, the goal isn't to jump the gun and go for the most realistic approach, but rather to practice the fundamentals and how a ball rotates as it bounces through the air.



Bouncing Ball Blog Link: <https://amaldonadoiii.myblog.arts.ac.uk/2021/10/20/week-two-bouncing-ball/>

# BOUNCING BALL

Bouncing Ball Development 2: <https://youtu.be/ILcft7BdiRk>

Lastly, after adding positional bouncing and incremental 90-degree rotations, I had to transform the ball to create a squash and stretch effect that would give a simulation that the ball is actually bouncing. However, depending on the ball material, they would bounce entirely different from each other, so I kept with a common rubbery ball type of feeling, which would allow me to create the necessary feeling that was needed.

Bouncing Ball Development 3: <https://youtu.be/SOquCy4VQ1o>

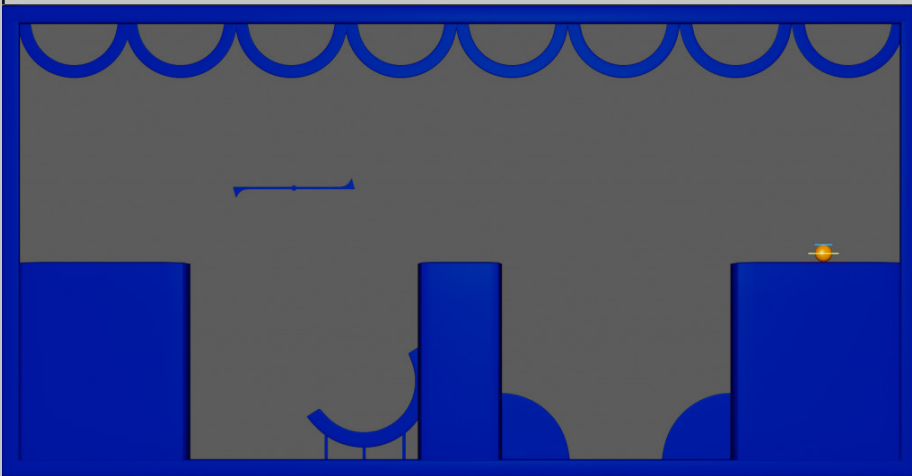
Overall, considering this was my first attempt at creating a bouncing ball animation in a new program at that, it was quite enjoyable. I can see many flaws within my own animation and can see already the skills I need to hone on. Specifically spending more time researching how balls bounce, and mimicking the arcs that these balls make on each bounce. Furthermore, fixing the squash and stretch so that the ball looks like it's bouncing up, rather than sideways would be a better way to show how dynamic the ball is. Of course, depending on the animation style, it can be acceptable to do this, but I am aware that my intentions were to go for a realistic rubber ball type-feel. The ball finishing can be touched up as well, slowly rolling to a stop rather than a sudden stop too. These are just a few mistakes within my own work that I see at my beginner level, and I plan to redo this project again to see further improvements within each revision.

Bouncing Ball Development 4: <https://youtu.be/JWcgq12FrTc>



# BALL OBSTACLE COURSE

I didn't have much of an idea going into making a basic obstacle course, as I didn't know what would be an effective course that could show off multiple skill sets (not that I have any – yet). So, I decided to just have fun with the process and block out something that looks like it appeared in a 1980s classic platformer.



I am very aware that this course probably does not benefit the bouncing ball strongly, but because I am entirely new to this, I just wanted to make the process fun and enjoyable so that this could be a repeatable experience for me in the future. Same as the classic bouncing ball project before this one, I began with a rough idea where I would want the ball to travel and use the obstacles for an interesting interaction between the obstacles and the ball. After doing that, I began with positional tracking to create bounces of where the ball with go, and made sure to correct the graph for a smooth bounce.

Obstacle Bounce Development 1: <https://youtu.be/rZV1ouxKeLU>

I did try my best to give some personality to the stage by giving it a pinball effect, but it did not come out as great as intended. However, I still decided to go ahead with the plan to see it through and see if I could fix small details by adding more functions to the ball later. So, I added rotational spins. I was unaware of how fast the ball would spin on each individual bounce, as realistically the angle and speed of a bouncing ball would determine the number of rotational spins in each bounce. Since I didn't know how to go about this problem, I focused just on getting the direction of the spin correct as a beginning stage, so that any future attempts can learn from this mistake.

Obstacle Bounce Development 2: <https://youtu.be/AjJ9e0A8kio>

After this step, I tried to add squash and stretch based on the height of each bounce as gravity would force the ball to squash more the higher the bounce. Whilst focusing on the squash and stretch of the ball, I decided to try my best to clean up the trajectory to make the bounces appear smooth and clean.

Obstacle Bounce Development 3: <https://youtu.be/jDZvZt1gTFs>

Overall, I am unsatisfied with this outcome, even at the beginning stage, there are too many mistakes and flaws that I can see at my level, therefore making it unimaginably painful for a trained eye. I think something that would have been useful would have been to provide primary research for the problems that occurred: (1) Using a ball in real life to see the degree of spins on certain angles and surfaces. (2) Seeing how high balls bounce at different heights and playing with the distances they cover. (3) Record data on how balls squash and stretch by finding slow-motion footage to provide more accurate results for a realistic ball feeling. Lastly, I could have made a more appropriate obstacle course that allows the ball to use its functionalities more appropriately.

Obstacle Bounce Development 4: [https://youtu.be/GrLHP\\_6EAo](https://youtu.be/GrLHP_6EAo)

# CHARACTER POSES

## ATTEMPT 1



Pose 1: The first pose is inspired by a samurai in the middle of an action. The action pose is a jump in the air and appears to be cutting something down with bodily momentum displayed by the stretching and rotation of his torso. Similarly to how a boxer rotates their heel to transfer energy in a blow. To capture this action with a dummy rig was hard, as 'human expression' is key, but I believe I captured it.



Pose 2 is to capture the essence of someone screaming in agony whilst on their knees. There is a lot of detail within the fingers and how they're curled with a level of visible stiffness. Furthermore, we can see a 'C curve' with how the character is slowly slanted towards the top left.

# CHARACTER POSES

## ATTEMPT 1



Pose 3 has a nice angle where we can view a perspective from the left and right sides, allowing me to better capture the poser's posture. We can see that there is an 's' curve from the top of the head to the feet. It is very minimal and not exaggerated, however, it's visible, and something I should focus on capturing.



Pose 4 is to capture a 'c curve' type pose in a squashed frontal perspective from a sitting position. We can visibly see the poser is quite relaxed and not tense, so everything should feel natural and not tense.

# CHARACTER POSES

## ATTEMPT 1

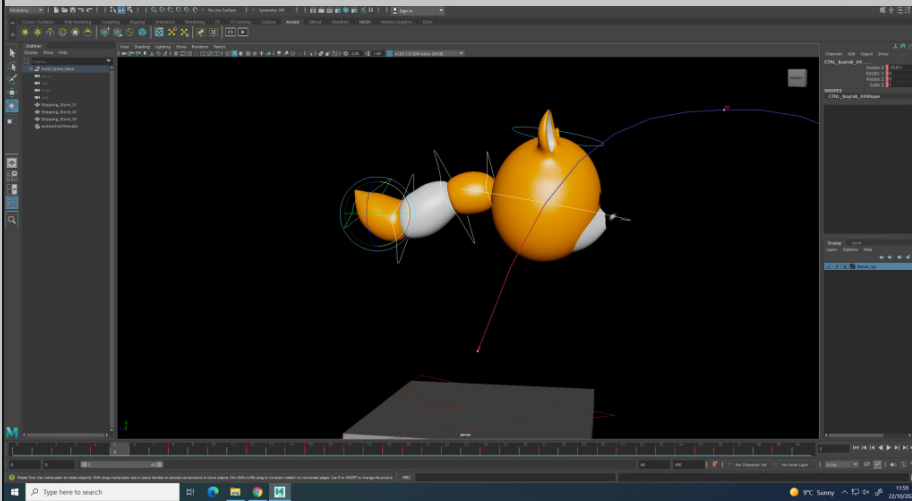


Pose 5 is an 's curve' type pose, however in a jumping position in the air, meaning capturing the offset of gravity is key. The character will need to look effortless in its jump, similarly to how the ballet dancer almost has an essence of floating.



Pose 6 is a 3D animated character, therefore making the pose slightly less natural. I chose this pose as it is quite exaggerated, and would be a great way to see if I can capture this dance/stretch in action. Of course, the body proportions are different to scale, but the idea should still be transferable. We can clearly see a strong 'c curve' with the figure when following their body, and this is something I want to accomplish within mine as well. Lastly, because we can see the dancer is balanced on one foot with their toes only, with a wide stretch – this means the centre of gravity in the pose needs to make sense too, or else they will look like the leaning Tower of Pisa, which we want to avoid.

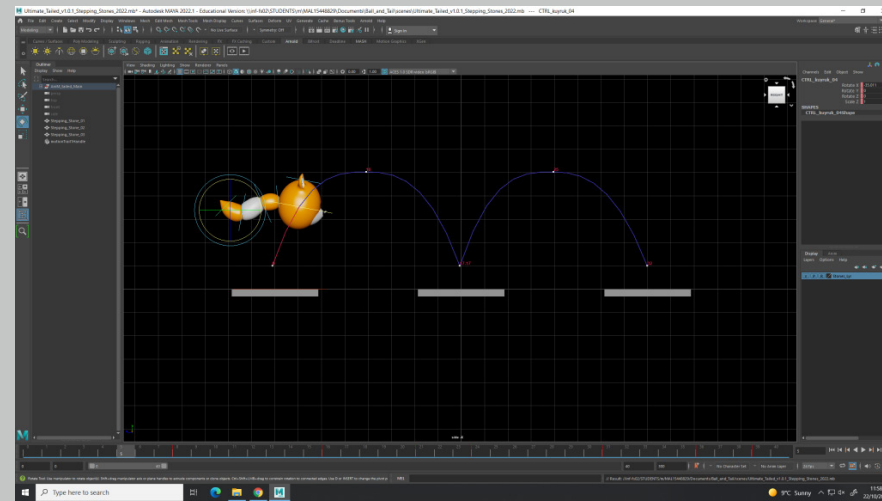
# HOPPING FOX



My goal was to use the techniques learned in the bouncing ball syllabus to assist the fox character in jumping with some characterisation. Even though the final product was quite choppy, it allowed me to have a greater understanding of how a bouncing ball technique can be applied to characters in a simplistic form. For the jumps, I only had to copy the same technique I had learned previously, the only difference being is now I had to animate a tail to follow the character.

Making the tail follow the fox is both simple and complex at the same time. It follows similar logic to that of a chain – continuing the momentum slightly delayed after the input. The inertia carries the momentum allows the ‘chain’ or in this case, the tail, to whip back and forth as the fox jumps.

This is achieved by breaking down each component of the fox’s tail and delaying it in the animation graph so that the hop effects have time to allow energy to pass from the base of the tail to the tip of the tail.



Hopping Fox Bounce: <https://youtu.be/-45e6n6EmdA>

Hopping Fox Blog Link: <https://amaldonadoiii.myblog.arts.ac.uk/2021/10/22/week-three-hopping-ball/>

# WALK CYCLE ANIMATION ATTEMPT 1

Today I explored the notion of a walk cycle. A walk cycle is not a singular definitive move. It is complex and diverse and can be exploited in many shapes and formats to create a stylized or realistic type feeling.

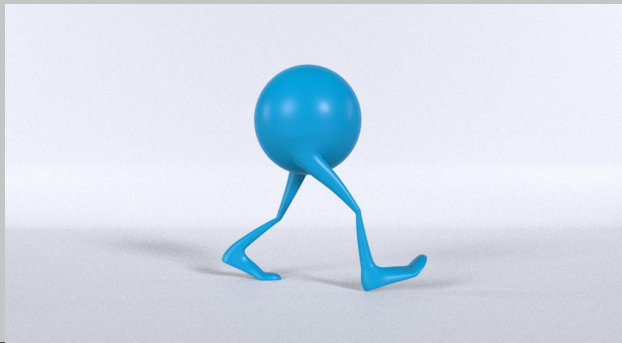
Therefore, I began blocking out a 24 frame walk cycle to begin with, just ensuring that the feet move the way I want them to. Of course going for a semi-realistic feeling by nature. What this means is that the toes must flop depending on whether they're landing or raising due to gravity, as well as getting a smooth bobbing effect that occurs when a character walks.

Walk Cycle Blockout 1: <https://youtu.be/XOSRI9mmUM0>

Walk Cycle Blockout 2: <https://youtu.be/Bly9dq8q1OE>

After creating this simple frontal and side view of a character walking for 24 frames, the next goal was to create a cycle (a loop of the same recurring frames). I went into the graph editor to firstly smooth out any flat or off-set curves and round them out to my liking for a cleanup, then began to cycle the frames continuously so that the character now walks by themselves.

Walk Cycle Blockout Final: <https://youtu.be/0pfQlmCfi1s>



Walk Cycle Blog Link: <https://amaldonadoiii.myblog.arts.ac.uk/2021/10/29/walk-cycle-animation/>

I've noticed that if the character has a smooth walk cycle, the character can create an illusion of walking, even when it only moves on a singular spot. But of course, the goal is to actually make the character walk, so I need to allow it to move along a horizontal axis from point A – B. However, without objects or imperfections in the scene, it's hard to see whether or not the character is walking on the spot or along an axis.

Furthermore, I've had to shorten the animation walk cycle from 24 frames to 23 frames to provide a continuous loop, as in the 24 frames, the beginning and end frames are identical which would make a pause or jitters in the animation, which we want to avoid. Because the beginning and end frame are identical, we can loop the animation from 0-23 frames, because  $0 = 24$ .

Lastly, adding details (like a mustache) allow for the objects to fill in any missing gaps. The audience can use this information of a bobbing mustache and fill in the gap that the character is bobbing up and down as they walk, which will define the speed and pace of the character. The character is walking straight towards the camera, however from the frontal perspective is quite hard or near impossible to tell.

Final Walk Cycle: [https://youtu.be/PrLqI\\_m\\_s4E](https://youtu.be/PrLqI_m_s4E)

Moreover, seeing the character sway ever so slightly from left to right with a rotational pivot from the non-existing hip line provides depth. Depth within animation can be seen with how detailed a character moves and walks, if the character didn't sway, it may give an impression that it is a non-organic being such as a robot. We want an organic feel, which is imperfect in almost every form. This means staying away from symmetry, as the imperfections is what the human eye is attracted to, to identify if an object is organic or not.

# ROTOSCOPE CHARACTER ANIM 1

For my first attempt in 3D Rotoscope animation, I decided to use a clip of a person boxing. What is a 3D Rotoscope? Well, it's a similar process to that of a 2D rotoscope, which is to draw over existing footage as a reference and create visual animation that's from pre-existing footage. So in a 3D mindset, this means to put a video behind the objects or characters you plan to animate, and to either copy or be inspired by the footage behind.

Rotoscope with reference: <https://youtu.be/5G8mRAOGa0I>

Rotoscope with no reference: <https://youtu.be/B2vLAX0nOLU>

As you can see from the two videos above, one is with reference footage, the other, not. When removing the reference footage, you can get a feel of the 3D character and their personality from design and animation in conjunction which allows you to add personality.

Cleaned Graph Editor + Reference: [https://youtu.be/Pa\\_bdIkNcjY](https://youtu.be/Pa_bdIkNcjY)

Cleaned Graph Editor + No Reference: <https://youtu.be/BFTaIFP2iow>

There are a few problems with the animation even after cleaning the graph editor, which is showing with the rotation in the hands as well as the punching bag, due to it being unclear where it is at times as it's cut off in the footage. An addition to it is that the camera has a lot of destabilisation which proves difficult as it throws off the position of the character and bag quite largely. However, I feel I understand a few of the ideas necessary to create an improved second attempt.

# ROTSOSCOPE CHARACTER ANIM 2

Final Product: <https://youtu.be/cNXmtvr85bE>

Animation Process

Research

How did we get here? Well, first we had to look for some new footage that would be more stabilised and give me a clear cut image of my model and scenery, as my last mistake from my previous attempt relied on bad footage that required guesswork. So, after some online digging, I found a video that captured the movement of a boxer at a clean, fast, impactful pace that I wanted to imitate in my animation.

Original Footage: <https://youtu.be/9p9x9TivHP0>

Staging & Animating

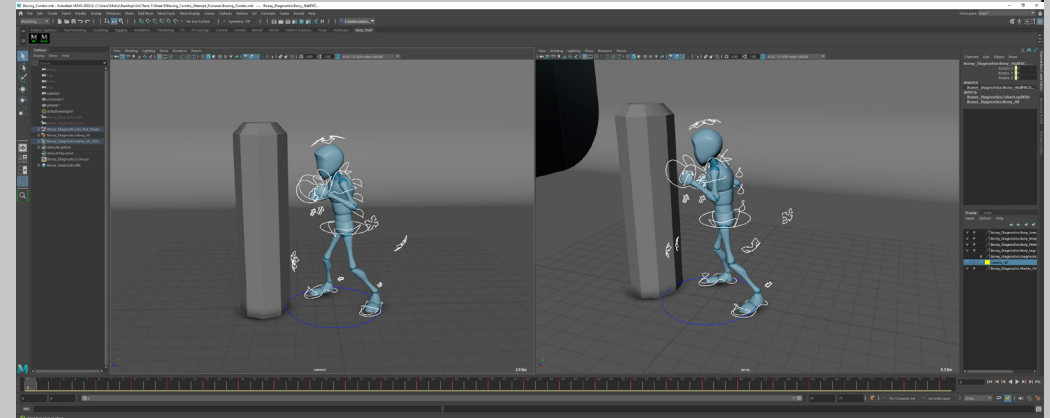
After importing footage to Autodesk Maya and setting up my character and scene, I began to keyframe the characters movements in sets of 12. Meaning every 12th frame I would pose the character, to capture key poses. This process gives me a rough concept of my characters movement and allows me to see how well they would flow together. Of course, I want the character to feel real, with stylised boxing feel being produced only by the characters design, but not his movement.

12 frame keys: [https://youtu.be/N\\_SCQDHD3tY](https://youtu.be/N_SCQDHD3tY)

After completing the key poses, I would go back and apply filler keys or in between keys that (obviously) go in between all the 12 frame keys. So, I slowly started doing every 6 frames, for a well-rounded feeling and to provide a smoother effect that of course has a natural 'humanesque' essence to it. Then obviously doing extra filler keys in sets of 3, which would even further the detail of the character's movement. But I wanted to ensure I was keeping on multiples of 3 since 12 and 24 are both evenly divisible by 3, meaning I would have even keyframe spacing and consistent movement with jerky animation.

6 frame keys: <https://youtu.be/mLWJqS0Ly2o>

3 frame keys: <https://youtu.be/6byxAdfBq68>

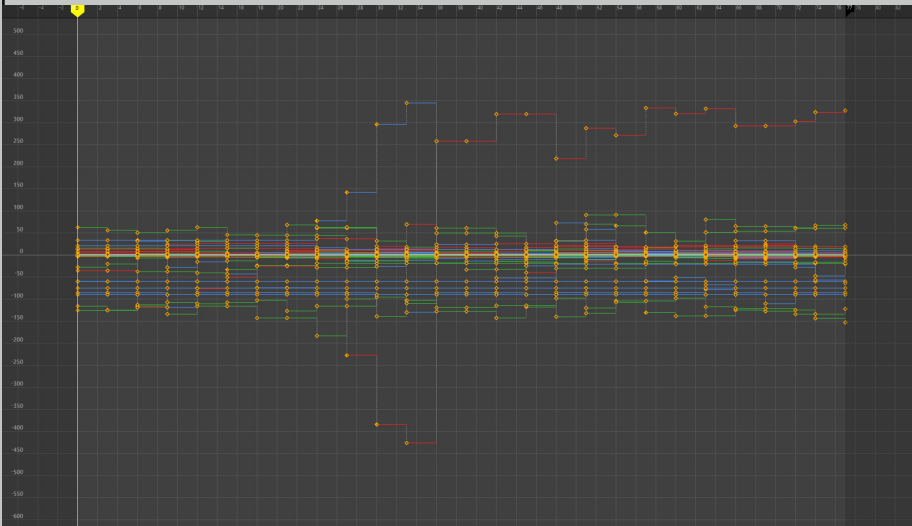




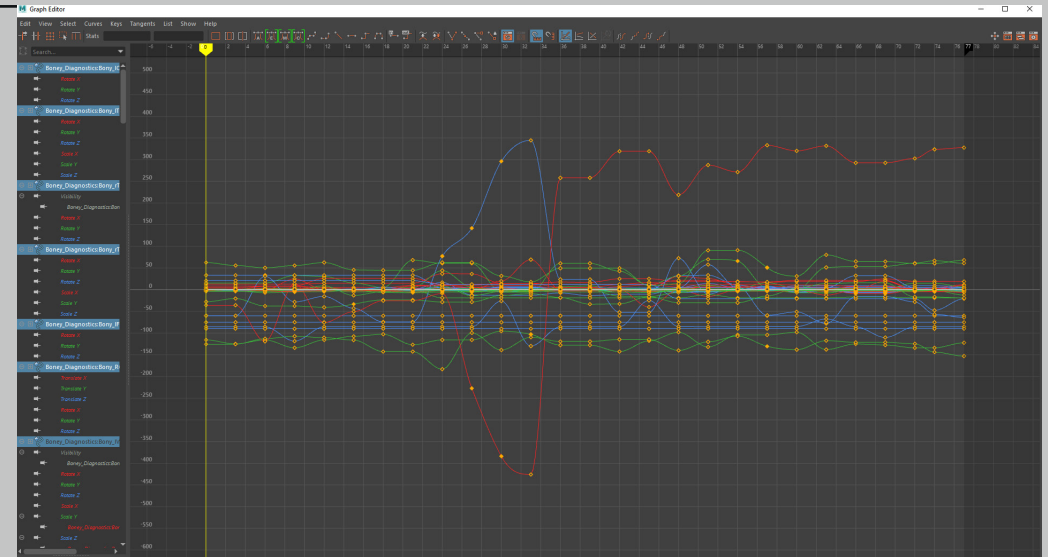
# ROTSOSCOPE CHARACTER ANIM 2

## Graph Editing

When it came to animating, we were ensuring to animate in steps, which would create an old-school type animation that means every frame is dependent on itself without any computer interpolation to fill in any gaps of animation, which is why the previous animations are quite snappy. An example of this in the curve graph can be seen in the screenshot below, and how the lines of the graph are in steps like a staircase and quite flat.



To create a bit of stylisation and make the character have some feeling to it as if it's not a robot of some kind, we need to play with the graph creating a curve sheet, and tidy it up. And after doing that we come up with a graph that looks like this.



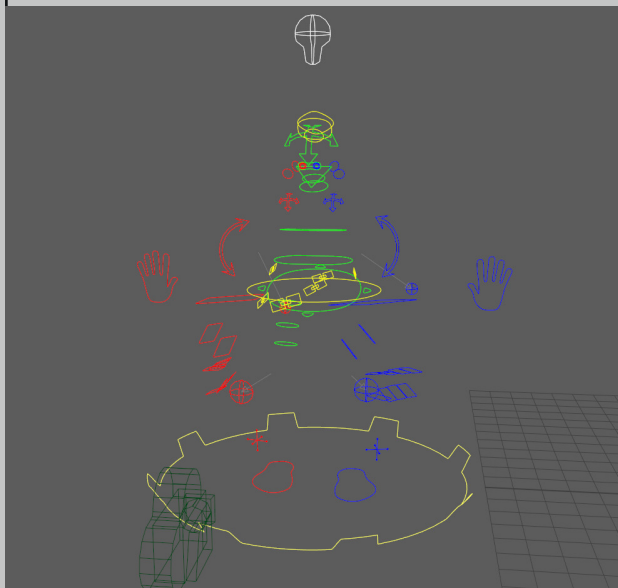
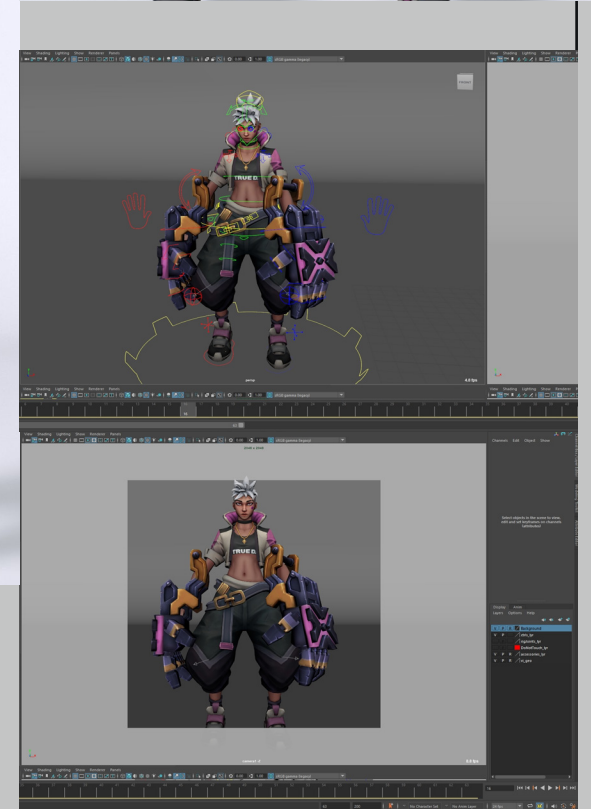
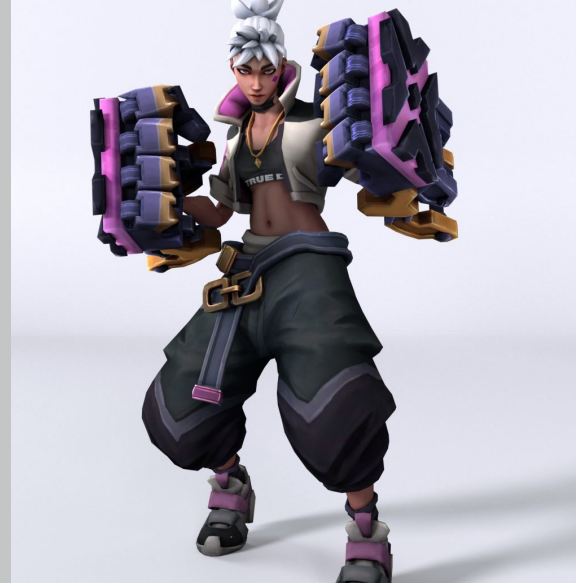
Some of the curves can be rounded out more to create a form of fluidity, but I sharpened some of the curves to keep some aspects of the snappiness in the movement, to make it feel like a slight cartoony character with realistic movement. This was more or less experimentation, to learn how the graph editor can manipulate the character's movement and limit test the situation.

# CHARACTER POSES

## ATTEMPT 2

For character poses, I wanted to make a second attempt posing a character that had more intricate components to them, from clothing, jewellery, to even hair and armour. This led me to pick a video game character model from League of Legends and pose the character with the personality you would expect from the character by physical appearance.

There were far more controllers to pivot and move about which made the process longer and requires planning out but was also something I could still enjoy even though it was a step up in difficulty.



I didn't want to pose the character based on existing personality that those who've played the game or seen the tv series would know... so instead, I took the physical appearance of how this character looks and tried to create a punky yet serious undertone of personality through her poses.

# ADVANCED BODY MECHANICS

For the Advanced Body Mechanics (ABM) project, we worked with a progressed version of Body Mechanics – Hence the additional keyword being Advanced. Although we are rotoscoping the majority of the project, what makes it advanced is to do with the switch between IK and FK control keyframing on the fly. It is as much as a headache as it sounds – a lot.

We begin by finding and using reference footage of a higher form of body mechanics, backflips, parkour, contortionism, anything that sounds painfully complex to do in real life, is equally painful to do in the digital 3D world. The reference I am using is a provided reference of a running person vaulting over a staircase-like object. It may not sound complex, but the complex part is where the actor is using a continuous momentum of the jumping movement to clear enough distance for the staircase, yet while his body is in full motion, his hands stick to the staircase like glue and swiftly lift off the object as a foot does with the floor when walking.

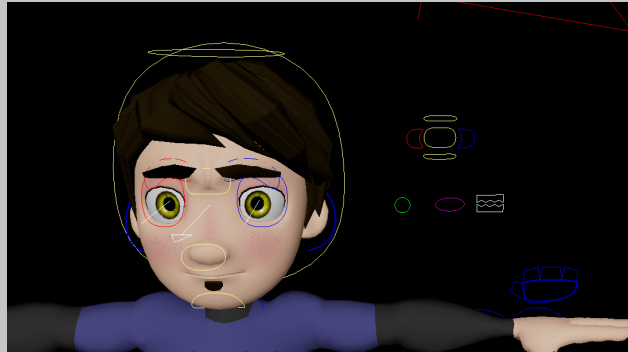
ABM Reference Footage: <https://youtu.be/HNOGfxOOZuo>

So I must block out the animation of the character using rotoscoping just as done in the previous project. Once I accomplish that, it's about locating the advanced part of the animation and switching the hand controllers on and off between IK to FK and duplicating the set of arms multiple times to have different controllers for each duplication. However, the finishing to the cake lies in the graph editor and cleaning up the finished project to give an appearance of fluidity.

ABM Final Product: <https://youtu.be/eqW17Y0mWD4>

I'm aware that my animation isn't as smooth as it could have been if I had more practice, but I find this style of working quite enjoyable and would love to use similar techniques. The idea of rotoscoping with reference images for that personal touch is fun but almost feels like cheating to me as it feels so easy for me. But then introducing these advanced mechanics showed to me that it's more detailed than I had originally assumed and has its own flaws and tough workarounds that animating traditionally would provide.

# LIP SYNC



For our Lip Sync project, I decided to go with two sound bites. One of them is a scene from a well-known game called 'Metal Gear Solid'. A simple voice line that allows me to attempt lip sync for the first time. Since I've never done Lip Syncing before, I found this quite tedious and challenging for as simple as it may appear for face value.

Once I had my character rig and voice clip ready, I had to import the audio into Maya as a .WAV file so I could accurately assess the audio and fine-tune the sync with the character's mouth movements. To do this, I had to begin with basic jaw drops just as an anime or puppet character would do. This is to create the illusion of speaking and can be quite convincing when timed correctly.

Once I had created the jaw drop timing to the character, it was all about moving the lips and tongue to match the words being shown so that a live-viewer could look at the mouth of the 3D character and recognise a word, rather than giving the appearance that it is a foreign dubbed animation.

Lip Sync 1: <https://youtu.be/MXFuTUN5zaw>

After completing this task, I had believed the technique was simple enough to do on a more advanced character rig. So I looked online and pulled out a character rig known as Aang from Avatar: The Last Airbender. Without testing the rig or knowing its values and control limits, I dove headfirst into lip-syncing. However, instead of sticking with an audio piece I was already familiar with, I looked for more emotionally dynamic audio that had different levels of volume and intensity.

The audio I eventually decided to go with was one from an anime called Death Note. The scene depicts a character being exposed for his evil doings, and the arguably evil character expressing that his actions are just. To me, it sounded more like a plead of innocence at a trial or a hearing of some kind, so I wanted to go for a police station investigation room chamber for the scene and began creating the theme.

Voice Clip I Chose to Use: <https://youtu.be/HlBZHmA-Neo?t=85>

I found out after beginning the animating phase that I was using an outdated model that needed to be updated, and wasn't quite compatible with my version of Maya 2022. I had already spent a long time doing the lip-sync and was too far in to redo the exercise with an updated rig that works with my version of Maya. I took this as a learning curve to play and check the rig before committing time to an exercise that would become a hindrance.

Furthermore, I feel I should have spent more time playing with the graph editor to fix the obvious problems such as body clipping into the table and chest. And looking back at my final outcome, I wish I had put in more keyframes to create a less-robotic stiff character just as I had done for my Rotoscope animation project. I had assumed that fewer keyframes would have been appropriate since the character was sitting, but learned that my character lost subtle movements that humans naturally have even when in a docile position. By far, this was my least successful project, and I wish I had more time for a second attempt.

Final Lip Sync Render: <https://youtu.be/ROsJYT6oFuE>