Advanced Rendering and Visualisation Evaluation

Lighting & Camera Work



So, in my first scene, the main idea was to have the clock change the time from 11 to midnight. The reason for this is that in almost every thriller/horror movie all the action happens during the nighttime and as I wanted to play with the blue light from the moon coming through the windows, I needed to feel darker inside.

As you can see in this first scene, I animated the clock in After Effects and the light in 3ds Max. There's some moonlight coming through the window and you could see the reflection standing on the side table. This gives a bit more light in the scene as if I had left it with only the light from the lamp it was not enough to see the table surface.

In terms of rendering and camera position, I only needed two frames to render. One with the lamp light on and another one with it off. That was thanks to the camera that kept still all the time.

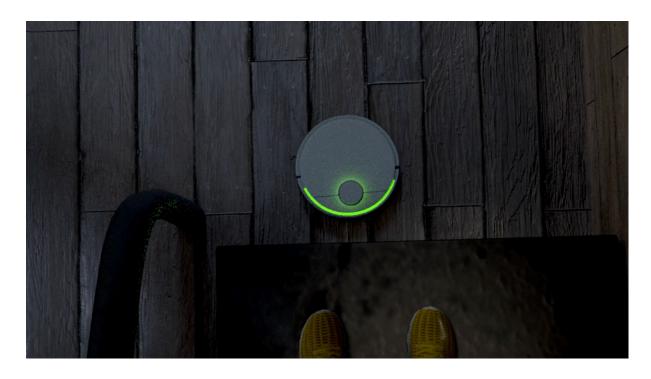
In this first shot, the main attention was needed on the lamp and the clock, so I didn't make use of any camera movements, I left the music and lights to do all the work.



In this second shot, the action was about to start and as it is about AI taking control, I felt that the best way to start was to have an iRoomba working on the ground floor. This action will wake up the character and go downstairs to see what is going on.

In terms of lighting again we can see the reflection of the moonlight coming through the window. It is subtle but gives a nice contrast with the green reflections of the Hoover.

The camera angle is positioned at Hoover's altitude for the spectators to drag their attention to the animation of it.



When the vacuum reaches the end it turns around itself and we change the camera shot. This time from the character's eyes point of view. The camera is animated and it follows the vacuum as it gets to the stairs. We needed to have the target camera animated because if we are getting from the character's eyes perspective these might be following the Hoover.

In this scene, I had 4 different lights set up. Two coming from the windows, one coming from the iRoomba and another one that is illuminating the character's shoes. There's a nice reflection of the vacuum on the railing, this gives credibility to the scene.



In my fourth scene, I wanted to have a wider shot. Until this moment it was all closer shots and it was time to show the spectator the whole scenery. In this particular scene, I had the lights animated turning on and off.

I used the lamps that were already part of the furniture and added light to them so that they could fit in the scene. Apart from that you can see the reflection of the moonlight and part of the exterior light from the HDRI.



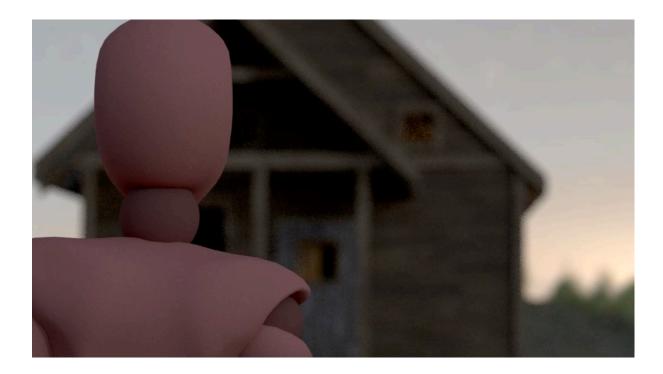
In this next scene, I introduced Franco, our next main character. He is giving a speech through the tv, and in terms of light we can see its reflection effect on the table surface. We have as well the blue light that comes through the window illuminating the column. It gives a nice contrast between the warmer house and the cooler night.

In terms of camera movement, I have a panning shot that comes from the right and then goes slightly to the left so that we can see Franco better. This gives mystery to introduce a new character into the scene.



In my sixth scene, the girl is inside the house and looks outside through her window and as she looks the camera makes a focal shift that allows the spectator to see exactly what she is seeing. At the same time, the camera zooms in on the character that is standing outside.

We can see three types of lights in this scene, the light from the HDRI, the one from inside the house and the one that the character has on its top, this third light is used a lot of times in horror films and we can see that apart from giving mystery to the scene it reflects a nice shadow underneath the character.



In my last scene, we get to see a completely different POV. The new character (AI) is standing outside looking at the house. I've put a camera right behind him so that it is clear who is looking at the house. There is also a horizontal pan but this time it goes from left to right. Following that movement, we have a focal shift that changes from seeing the character in focus to the house.

In terms of lighting, we have a nice HDRI nighttime and the light that comes from the interior of the house. This last one demonstrates that someone is inside the house as the lights are on.

This was my evaluation behind the scenes, now I will reflect on the strengths and weaknesses of the project, as well as the challenges and how I've gone through them.

I think that the strengths of this project are the camera work that I've done, it tells a good story and at the end of the 40 seconds, it gives you a good sense of what would happen next.

On the other side, one of my weaknesses was adjusting the lights and deciding which light shall I use for each scene as it always was looking darker than I wanted.

I'd say I achieved the mood and feel I was looking for. I am pretty happy and satisfied with the end result and even though the Franco part was made afterwards and I've never planned to have him, I think that, in the end, it gives some humour to the story, which with all of that mystery, was needed.

One of my biggest challenges was to time all the shots correctly with the music, as I couldn't import the music into the 3d program and I needed to render the exact frames that the music changes were asking me for I messed up with it.

In my Franco scene, I didn't render enough frames so I needed to after rendering a huge part of it, go back again and render some bits that were left. But what happened is that I completely changed the set-up with my lights for my next scene, and I didn't remember how it was. I didn't save a copy of the other set-up and so you can see on the final render that the light changes in the last few seconds of the Franco shot.

If I were to start over this project I would have investigated better how to time the music with the scenes in a better and more efficient way as well as remember to save all the versions of the file as I am updating it, so that I am missing frames to render it won't be a problem to go back and render a few bits more.