

Deadline: May 23rd 2022.

One of the acquired skills that was most useful to me was to “think in 3D”, because as mathematics and physics students, we are accustomed to overview all in flat coordinates, to imagine how the things would look like if we do something in this “2D world”, but when I started to work on the project the thing that I realize was correct, wasn’t, so for example, when I made the animation of dinosaur A, and it had to turn, I knew I have to modelate like a parametric circumference, but after the first turn was done, not all the variables “turn” their reference system, in other words, the moving around the stage stays put, but the coordinates of the plane where the turning circumference was traced, it did rotate its reference system. This *tricky* thing of the animation process was due to the order of the geometric transformations, making a rotation and then a traslation it’s not the same as making a translation and then a rotation, the results are completely different and cause disastrous animatios.

I also learned a lot of 3D modelling software and image manipulation software, I applied the the knowledge acquired in the theoretical classes and the practical exercises of the laboratory, I extrapolated and extended them to achieve the objectives of the Project. Texturing a model at first seemed very difficult to me, but it turned out to be difficult to handle the software (Blender), once understanding the use of the tools, the workflow becomes more and more fluid, textures with transparent sections allowed me to create objects that seemed to have more vertices than they actually had, I achieved this by projecting images with transparency onto a flat 4-vertex face and then placing the same plane at 90°, a technique known as "cross textures", with this, the foliage density level required for the scenario was reached.

The use of versioning tools, such as github, allowed me to review and control my own changes, very useful in situations where there was an error and I couldn't find the source, I could go back to the previous point where it would always work.

Finally, the estimation of the real costs if this project were sold seemed very interesting to me. It allowed me to analyze each part of the work I did and what weight it would have in the time I dedicated to that task.