**Daily Work**

**January:**

**Week 1:**

*Monday 6th*:

* read [morphable model of quadrupeds skeleton](https://hal.inria.fr/file/index/docid/389338/filename/MorphableSkeletonSCA05.pdf)s and more

*Tuesday 7th*:

* run Manon’s python code (install quaternion, plt 3D image)
* read papers, watch [rigging a dog](https://www.youtube.com/watch?v=0IB5KCPmEEI) (blender)

questioning the subject => still image or tracking skeleton from video?

*Wednesday 8th:*

* read [quadruped animation](https://hal.inria.fr/inria-00331715v2/document), [animal gaits from video](https://hal.inria.fr/inria-00384231/file/article3.pdf)
* nvm, not questioning the subject anymore
* after 3 FUCKING DAYS finally manage to download quaternion, kiwisolver, numba by going from python3.8 to python3.7 and by downloading f\*\* visual studio because it needs a C interpreters !!!! => Start looking / running previous python code

*Thursday 9th*:

* starting to work in Blender
* test placement of billboards
* creation of 3D elephant with 3 pictures from top, front and side by cutting in a cube

*Friday 10th*:

* use inkscape to create svg files => create directly an object of the form of the elephant silhouette
* look at interpolation between pictures from different angles

**Week 2:**

*Monday 13th*:

* Try to run Manon’s C++ code, didn’t manage to make #include<opencv> work with VSC (but works with VS)
* manage to create a ‘good’ 3D representation of an elephant by taking intersection of side, front and above ‘extrude’ view
* didn’t manage to put texture on selected faces

*Tuesday 14th*:

* manage to include opencv by putting everything in opencvTry folder (not ideal)
* can’t include shape.hpp cause it’s in the extra modules of opencv and can’t download opencv V2.0 to make it work
* found <http://bigwww.epfl.ch/demo/ip/demos/edgeDetector/> to detect edges on pictures => could be useful to find shadows to differentiate the right and left legs

*Wednesday 15th*:

* still trying to include extra opencv modules
* missing opencv\_world420.dll

*Thursday 16th*:

* FINALLY manage to make opencv works, after 3 days and more than 10 hours, using 35GB !
* start looking at the code => open diff orientations, go to the next image with ‘a’ => skeleton

*Friday 17th*:

* look at C++ code
* start coding 3D object in blender

**Week 3:**

*Monday 20th*:

* keep coding in blender, add a svg class, extrude from 3 diff views

*Tuesday 21st*:

* manage to put texture (images from side and top) on the 3D model by selecting faces

*Wednesday 22nd*:

* keep coding + texture
* talk with Damien Rohmer => billboards more flexible (15-20° error, should turn the billboard, fade to another view after a certain angle, start looking [volumetric billboards](http://www-ljk.imag.fr/Publications/Basilic/com.lmc.publi.PUBLI_Article@11e3c2463e4_4865ce/index.html)

*Thursday 23rd*:

* try to find measure on animals to create the back/front silhouette with a single picture from the side
* documentation on billboards for blender

*Friday 24th*:

* start coding billboards in blender

**Week 4:**

*Monday 25th*:

* still coding billboards in blender

*Tuesday 26th*:

* ‘Finish’ the billboard, tracking for face and back w.r.t the camera and top appears only on the back
* Talk with Pierre about the subject: billboards, 3D silhouettes, skeleton etc

*Wednesday 27th*:

*Thursday 28th*:

*Friday 29th*: