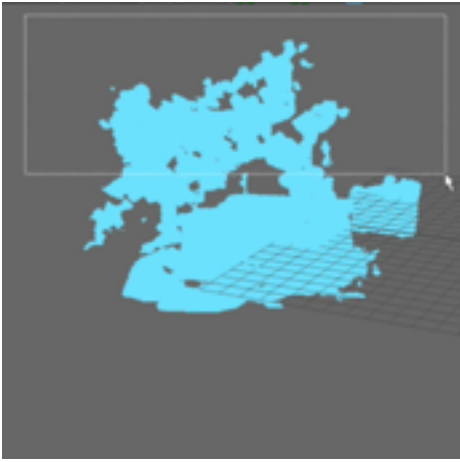# PHOTOGRAMMETRY CLEAN UP

VER 2.0

EQUIPMENT

- Agisoft PhotoScan
- AutoDesk Maya
- Photoshop
- UC win/Road Software
- Wacom Tablet
- Download object
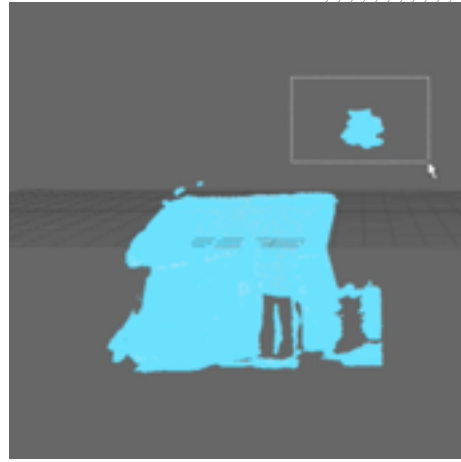- Download texture

DOWN-LOAD OBJECT

Recommend:
Video tutorial link: https://www.youtube.com/watch?v=JLgALA2OfRw
and
textures.com

IMPORTING AND CLEAN-UP OF OBJECT

1. Open AutoDesk Maya
2. File > import > .obj file
3. Right click on the object and select face mode
4. Use marque (square or lasso tool) and select or lasso faces and delete the faces you do not need
5. During the process > right click and go to object mode > edit > delete by type > the delete by history ever so often to make the file lighter
6. **Save file**
7. Continue removing all flanges and faces you don't want for your final object

Use marque square tool and select faces and delete the faces you do not need

Use marque square tool and select faces and delete the faces you do not need

CENTERING OBJECT

Center pivot needs to move to center of object
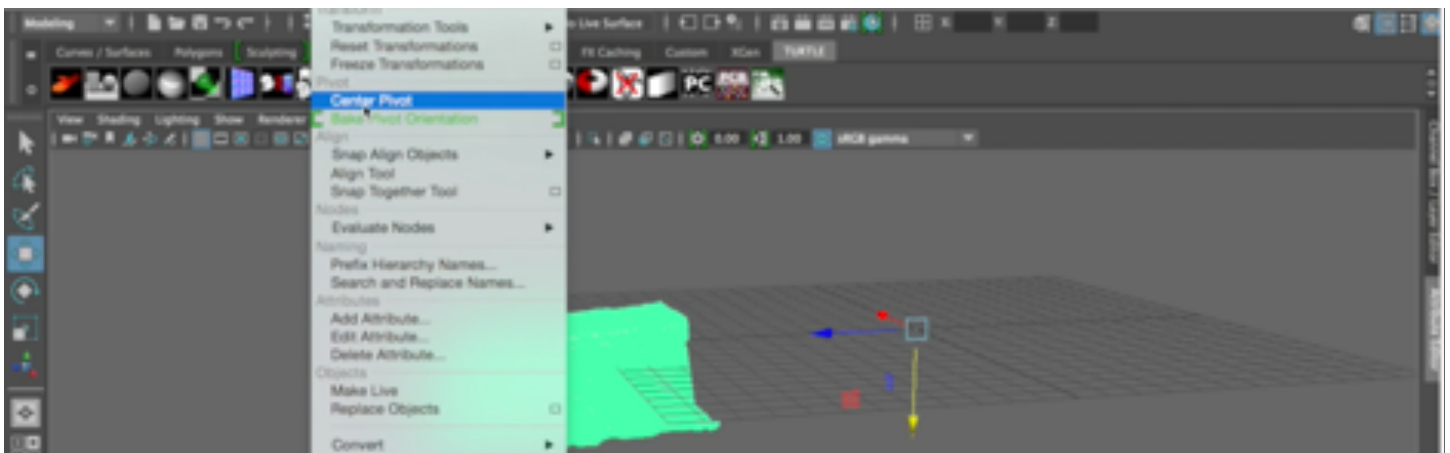
1. Modify > Center pivot (make sure all flanges have been removed)
2. Modify > Freeze transformation then center pivot and
3. Edit > Delete by history > History
4. Rotate object the orientation of your object is up and down (go to front and side view – hit the space bar to get to other viewpoints and use hotkeys w > move, e > rotate and r > scale to move)
5. **Save file**

BOOLEAN CLEAN UP
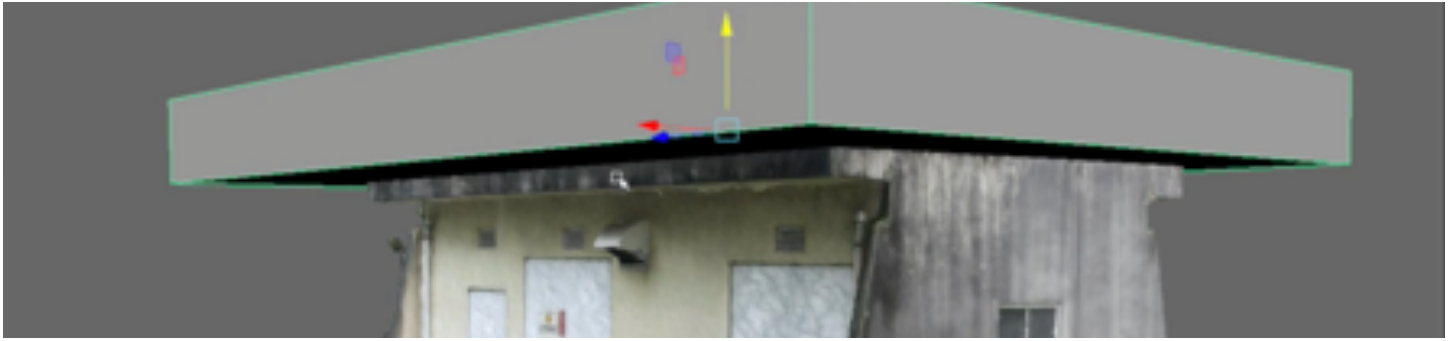
1. Create polygon box > Create > Polygon > Primitives > Cube (use w > move, e > rotate and r > scale)
2. Orient and position the box into the position and cover the surface you want to delete
3. **Save file**
4. Go to object mode (right click object mode) Select box then character then hit Mesh > Booleans > Difference (takes a few seconds)
5. Delete the flange data – go to face mode and delete the faces you don't need on bottom
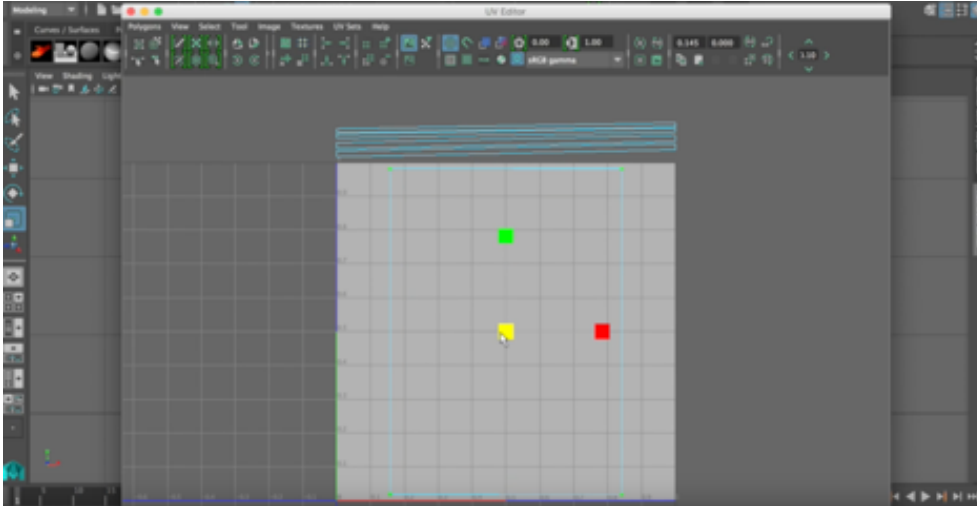6. **Save file**

POLYGON MODELING

1. Go to Create > Polygon Primitive > Cube
2. Go to object > Right Click > select vertex and select vertices you want to move
3. Use w = move tool, e = rotate and r = scale
4. Move the polygon cube to create a simple roof and building base
5. **Save file**
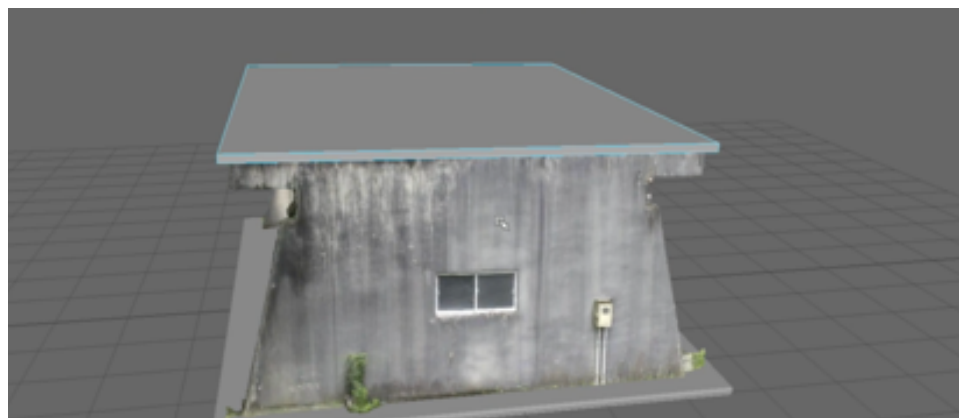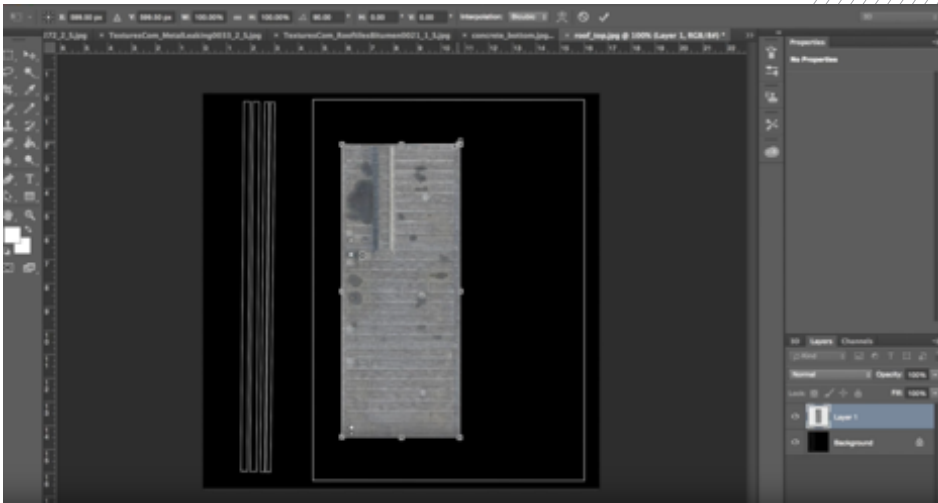
UV MAPPING IN MAYA PART 1

1. Select object (make sure you are in face mode)
2. You will need to open UV editor in > Windows > UV editor (have this open to edit)
3. Go to top view and select the bottom and top face
4. Go UV editor > and hit the Planar button (make sure Camera and Keep Image ratio checked)
5. Move the the UV map into the Gray box area Continue on with capturing the each side of the roof line
6. Go to CGTextures.com for building textures
7. **Save file**

UV MAPPING IN MAYA PART 2

1. Arrange the projected UV's into the gray area (make sure not to overlap)
2. R > click on mouse and select UV mode
3. Use w = move tool, e = rotate and r = scale to move UV points into the gray box area
4. When layout is finished select the object and put into object mode
5. Go to UV layout and make a UV snap shot (.jpg 1200 x 1200)
6. Make sure you know where you sent it
7. **Save file**
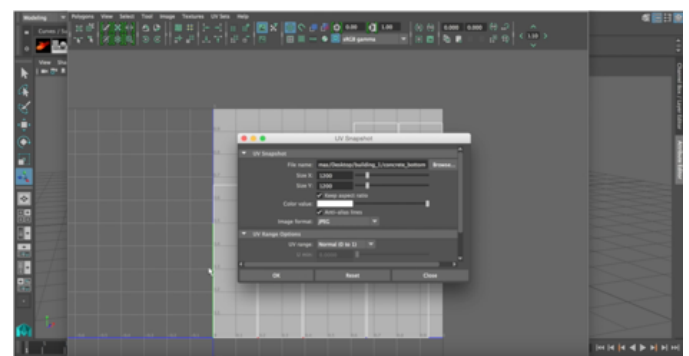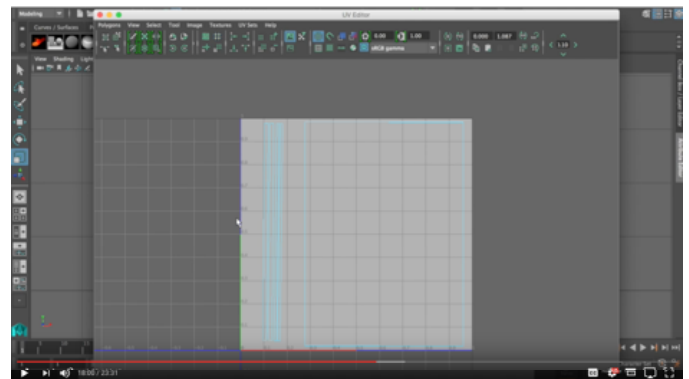
UV MAPPING IN MAYA PART 3

1. Open up Photoshop
2. Open up the UV snap shot you made
3. Import your roof textures you wanted to use
4. Use command T to scale up your textures into the area you want textures
5. Do this readily till you have all the surfaces covered
6. Export the final 1200 x 1200 jpg.
7. Repeat the same steps for the concrete base
8. **Save file**

ASSIGNING NEW MATERIAL

1. Assigning New Material
2. Go back to Maya file of building
3. Select the roof and change modeling mode to rendering mode
4. Go to Lighting/Shading > Assign new material > Lambert material
5. Go to Attribute section and select material
6. Select sub folder and select your final Photoshop .jpg material
7. Repeat this process for the concrete base
8. **Save file**

Graphic Design: Lei Zhang and Photo and Text: Thomas Tucker
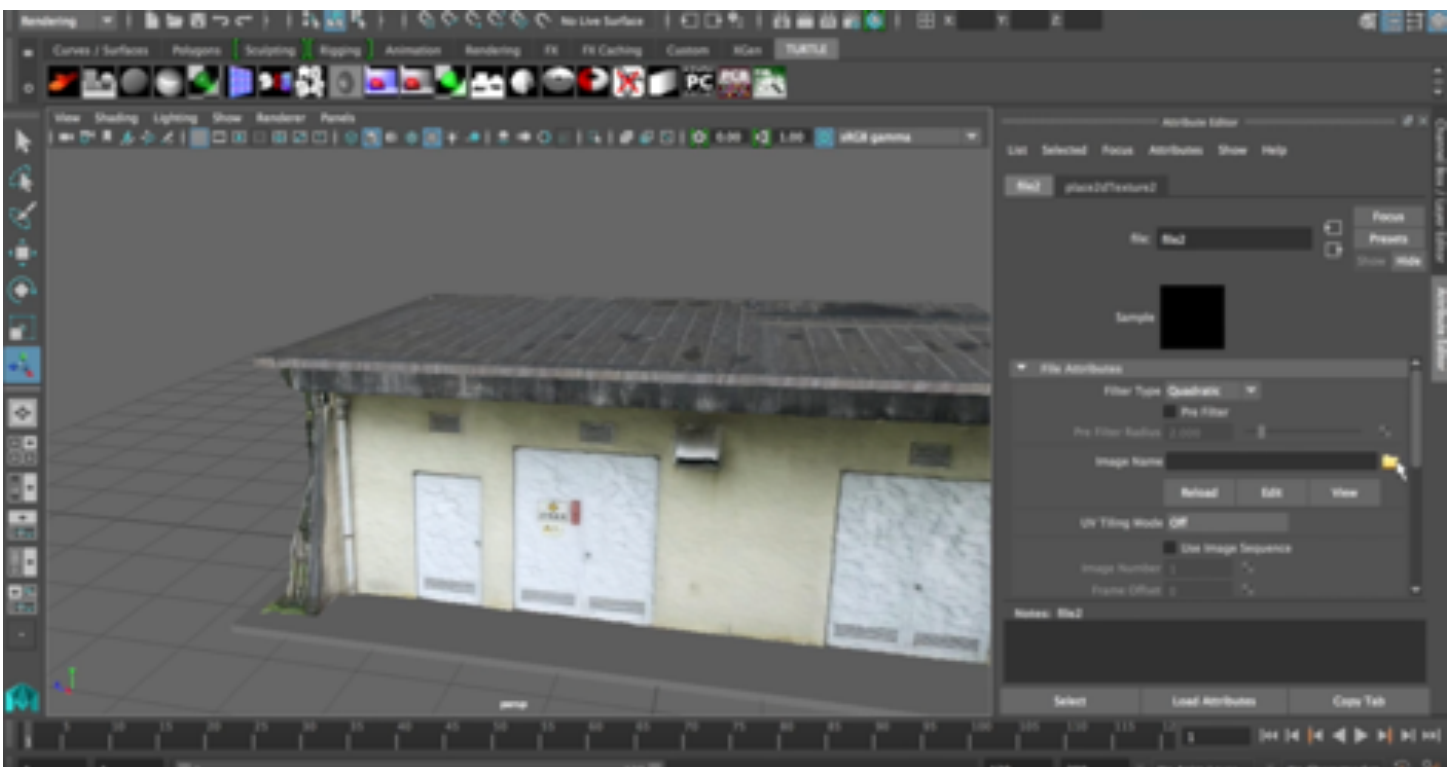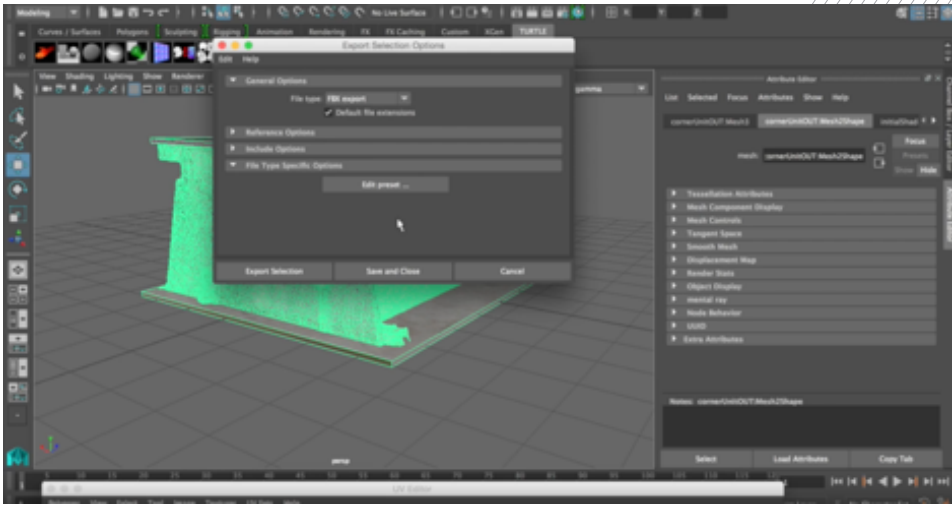
FBX EXPORT

FOR UC WIN/ROAD

1. Import the Zbrush object into Maya
2. Import the object head and assign the original texture onto the object
3. Select the object and export it in FBX export (this will bake the mesh and texture and ready to import into UC win/Road)
4. **Save file**

Graphic Design: Lei Zhang and Photo and Text: Thomas Tucker