

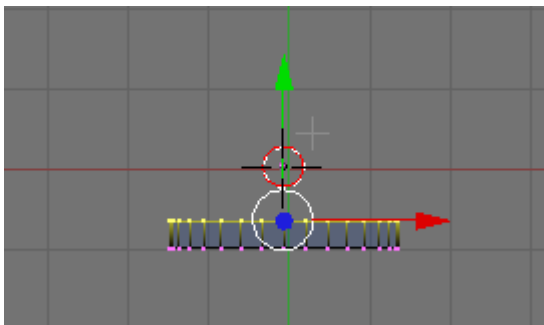
Course: 3D Design
Title: Text Model - Tufts
Dropbox File: TuftsText.zip
Blender: Version 2.41
Level: Beginning
Author: Neal Hirsig (nhirsig@tufts.edu)

Text Model – TUFTS

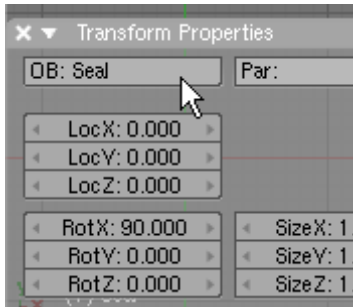


In this tutorial, we'll model 3-dimensional text (Tufts University) and animate it around the Tufts University Seal.

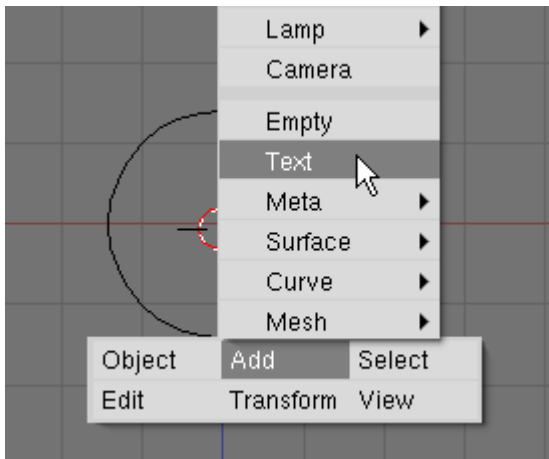
Open MyBlender.blend (or the default if you are using MyBlender as the default Blender file). Select the default cube and delete it. **Switch to Front View**. Place your 3D cursor in the center of the display. Press Space / Add / Mesh / Cylinder. Choose 32 vertices. Switch to Top View. Press the AKEY to deselect the vertices. Use the Box Select (BKEY) to select the top vertices. Use the Green Transform Widget to move the vertices down to create a small coin-like object.



Switch to Front View. Press the AKEY to deselect the vertices. **TAB out of Edit Mode**. In the Transform Properties Panel name this object Seal and set the LOC X, Y and Z at 0.



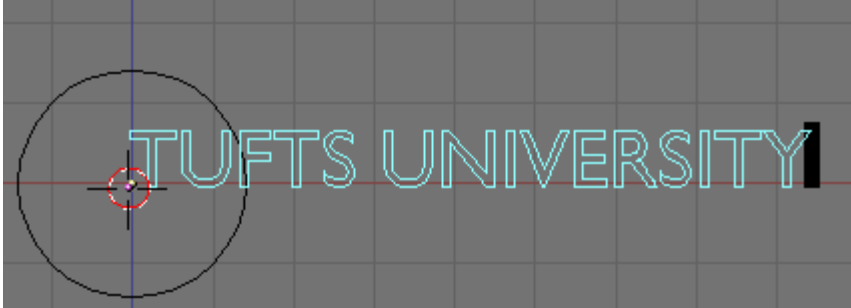
Press the AKEY to deselect the Seal. Place your 3D cursor in the center of the Seal. Press Space / Add / Text.



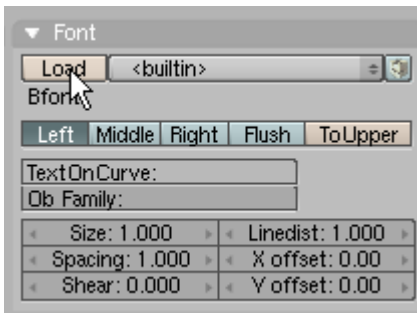
The letters Text will appear on the display.



Use your Backspace key to backspace over the text. Then type in capital letters TUFTS UNIVERSITY.



TAB out of Edit Mode. Blender uses a default font for text objects. However we can change the font to any PostScript Type 1 or True Type font. In the Font Panel press the Load button.



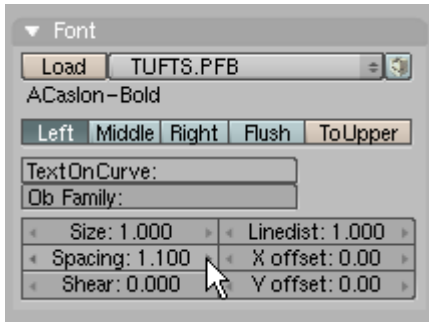
Select the Tufts.PFB font file. This file is located in the TuftsText.zip file.



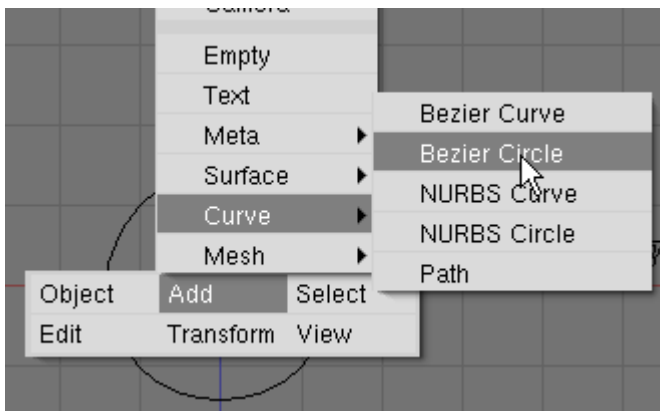
This changes the TUFTS UNIVERSITY text font.



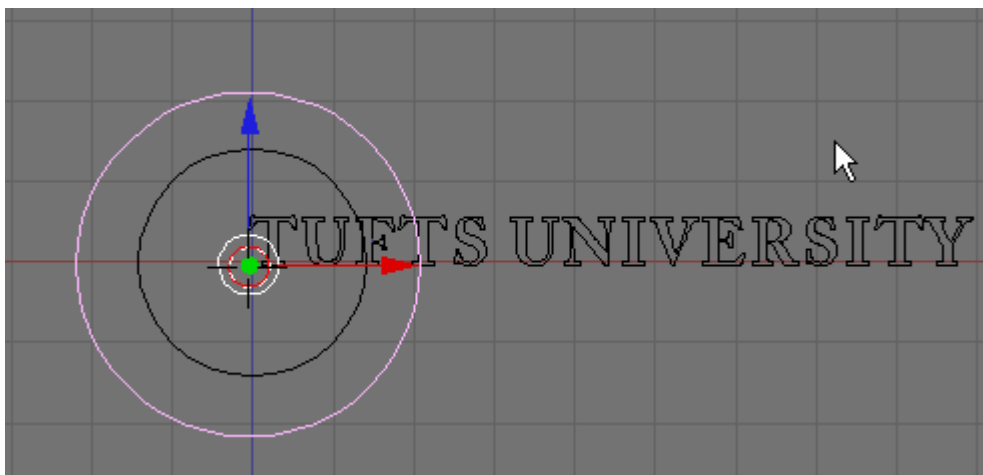
In the Font Panel change the Spacing setting to 1.1. This will move the letters a little bit apart from each other.



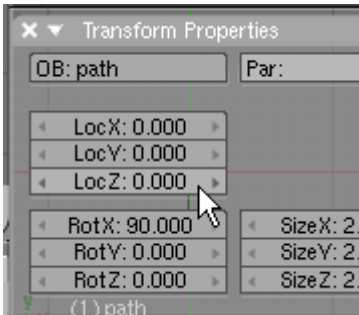
We want to curve the text in a circle around the seal. To do this we must first make a curved path. Press the **A**KEY to deselect the Text. Place your 3D cursor in the center of the Seal. Press **Space / Add / Curve / Bezier Circle**.



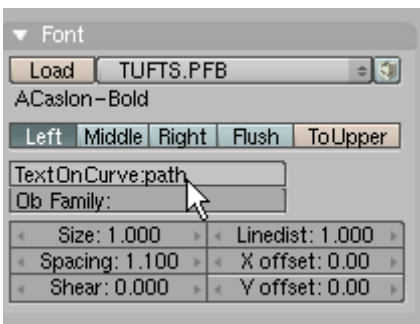
TAB out of Edit Mode. Press the **S**KEY (Scale) and scale the circle as shown below.



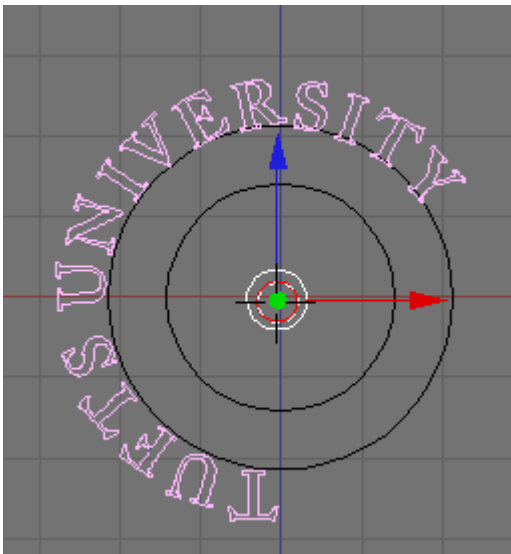
In the Transform Properties Panel name this object path and set the LOC X, Y and Z at 0.



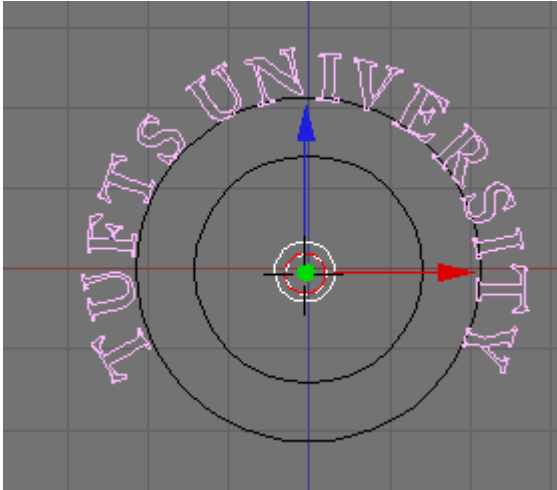
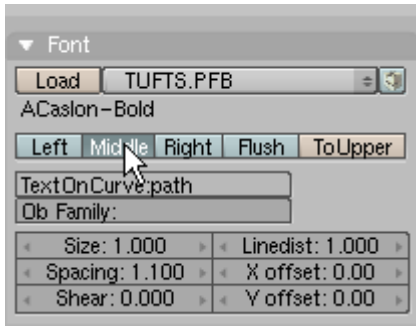
In the Font Panel type the word path in the box marked Text on Curve: Press enter and click in the front viewport.



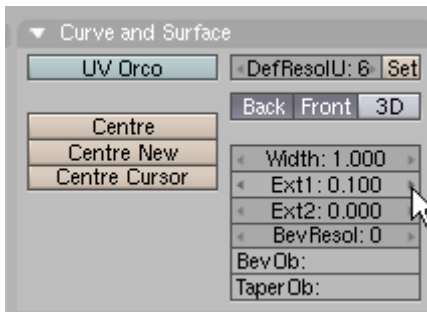
This displaces the text along the Bezier circle's curve.



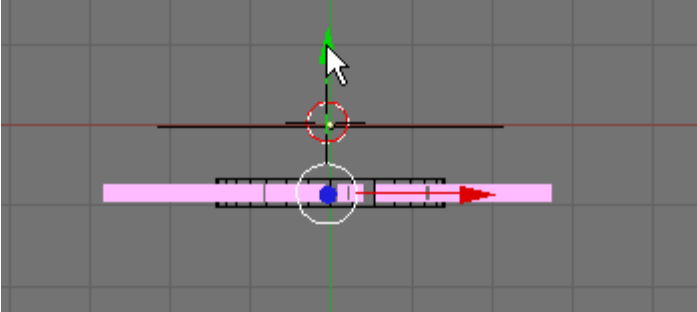
In the Font Panel press the Middle button to center the text on the circle.



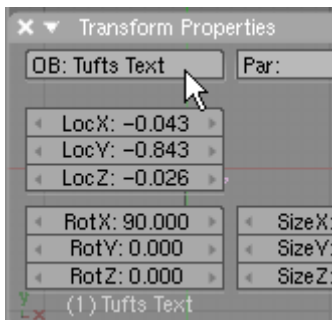
The text is still only 2 dimensional (but renderable). To give it more dimension in the Curve and Surface Panel change the EXT1 (Extrude) to .1



Switch to Top View. Use the Green Transform Widget arrow to move the text so it is on top of the Seal.



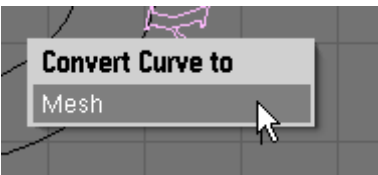
In the Transform Properties Panel name this object Tufts Text.



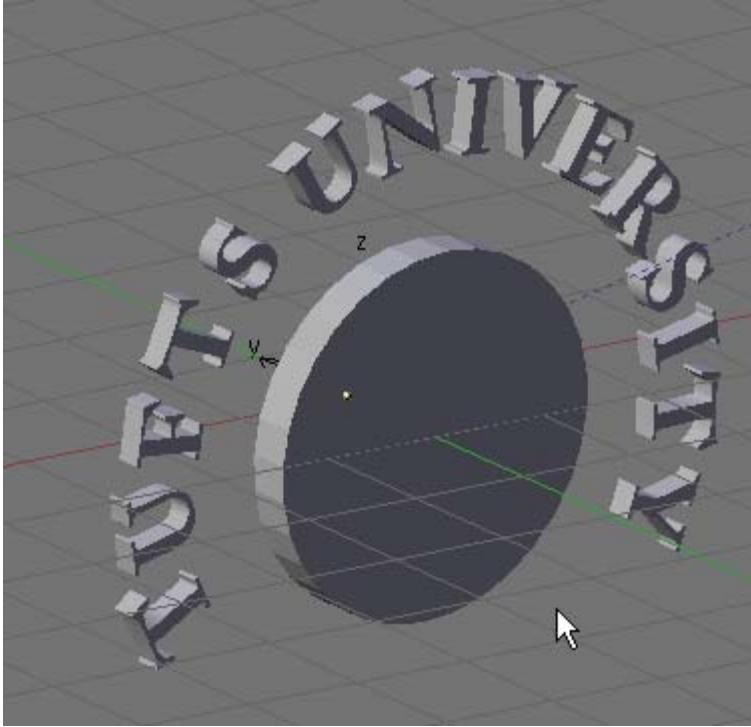
We want to animate this text so we need to convert it to a Mesh object and get rid of the path object. With the Tufts Text object selected press ALT-C and convert the object to a Bezier curve.



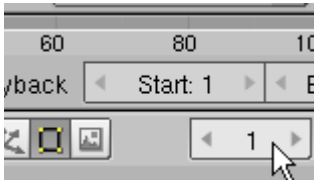
(Note: If we wanted too, we could now edit the individual letters) Now press ALT-C again and convert the curve to a mesh.



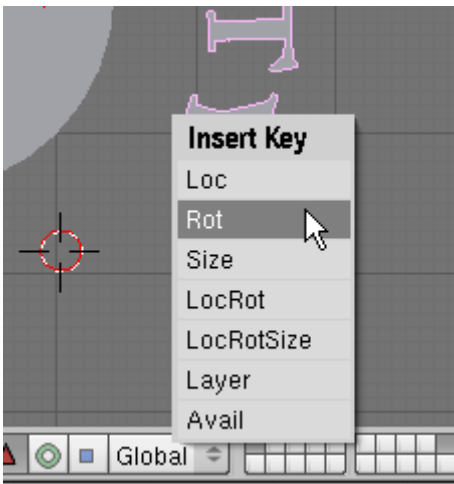
We no longer need the path object. Select the path object and delete it. Press the ZKEY (Shading) and rotate you view to look at the model.



Save your file F2. We want to animate the Tufts Text object around the Seal object. Switch to Front View. Make sure the current frame is frame 1.



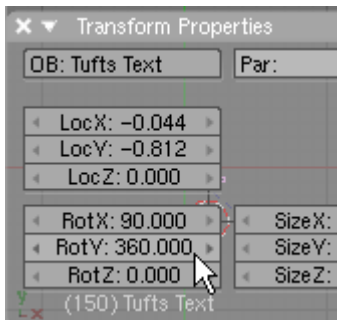
Select the Tufts Text object if not already selected. Press the IKEY (Insert) and insert a ROT (Rotation) key frame.



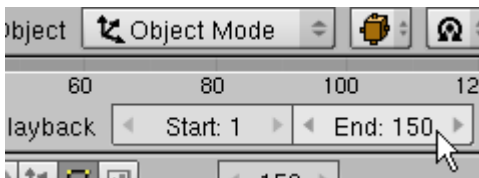
This records the rotation of the Tufts Text object in frame 1. Set the current frame to 150.



In the Transform Properties Panel set the ROT Y to 360 degrees.



Press the IKEY (Insert). Insert a ROT (Rotation) keyframe. This records the rotation of the Tufts Text object in frame 150. In the Timeline Window set the End frame to 150.



In the Timeline Window press the play animation icon.



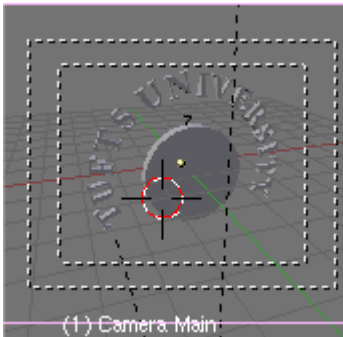
This plays the animation in the 3D viewport. You can stop the playback of the animation by pressing the stop icon.



Set the current frame back to 1.



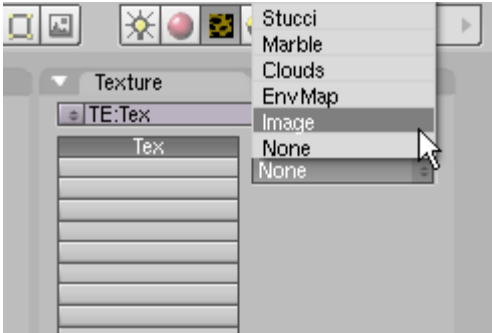
Save your file CTRL-W. Add layer 10 to the scene. This layer contains the Camera and Camera Focus objects. Switch to Top View. Change the lower right Perspective view to Camera View. (LMB click in the viewport and press (NUM0)). Select the Camera object in the top viewport. (The camera focus object is already at X,Y,Z = 0). Press the GKEY (Grab) and position the camera (in the top and side views) so that the camera view is something like shown below.



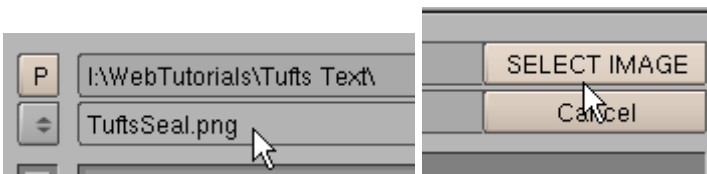
Switch to Front View. Add layer 20 to the Scene. This layer contains the lighting set-up. Render F12. Your rendering of frame 1 should look something like shown below.



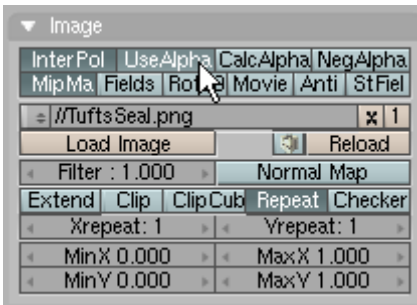
Select the Seal object. Press F5 (Shading). In the Materials Panel press the Add New button. In the Textures Panel press the Add New Button. Press F6(Textures). In the Texture Type dropdown box select Image.



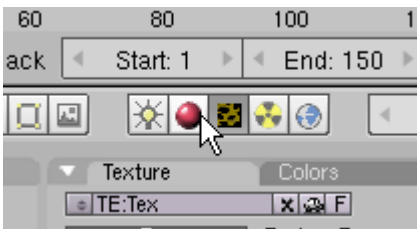
In the Image Panel press the Load Image button. Select the TuftsSeal.png image file. This file is located in the TuftsText.zip file.



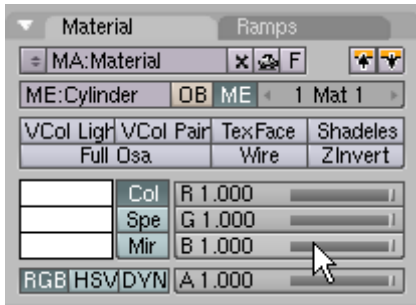
In the Image Panel press the Use Alpha button. (This .png file has a transparent background).



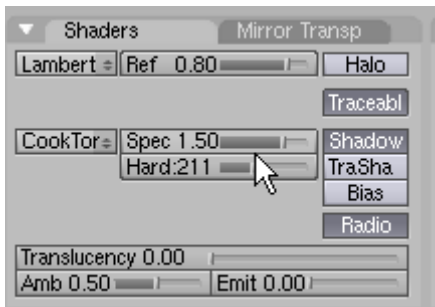
Press the Material Buttons sub-context menu icon (or press F5 – Shading).



In the Material Panel set the Red, Green and Blue color sliders to 1 making a white color.



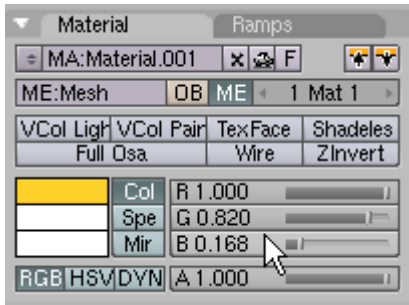
Press the Shaders Tab. In the Shaders Panel set the Specularity to 1.5 and the Hardness to 211.



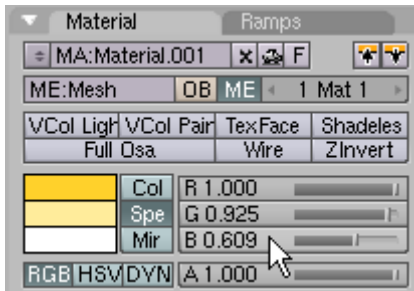
Render F12.



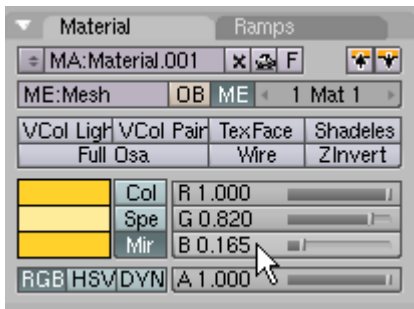
Select the Tufts Text object. Press F5 (Shading). In the Materials Panel press the Add New button. We will create a shiny gold color for the text. In the Materials panel set the COL sliders to R=1, G=.820, B=.168



Press the SPE button and set those sliders to R=1, G=.925 and B=.609



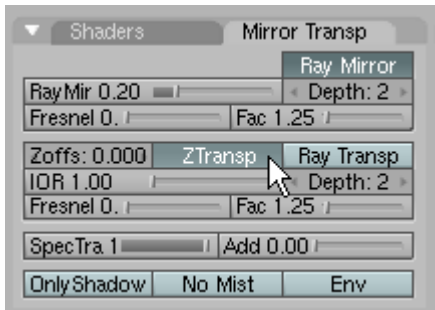
Press the MIR button and set those sliders to R=1, G=.820 and B=.165



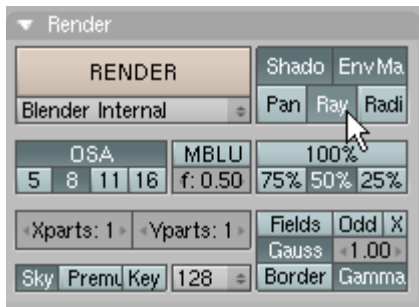
Select the Shaders Tab. In the Shaders Panel set the REF to .52, set the SPEC to .83 and set the Hardness to 27



Select the Mirror Transparency Tab. In the Mirror Transparency Panel press the Ray Mirror button (activating it), set the Ray Mirror setting to .2 and press the Z TRANSP button (activating it).



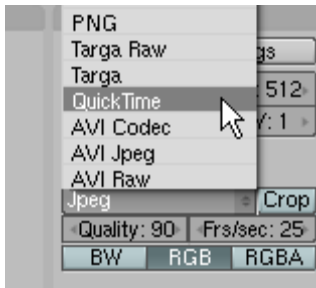
Press F10 (Scene). In the Render Panel make sure the Ray button is active.



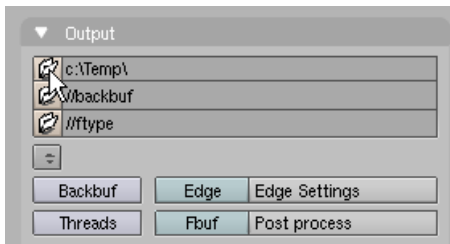
Render F12.



In the Format Panel change the file type from JPEG to QuickTime. Accept the default QuickTime settings



In the Output Panel, press on the icon to the left of the first output box.



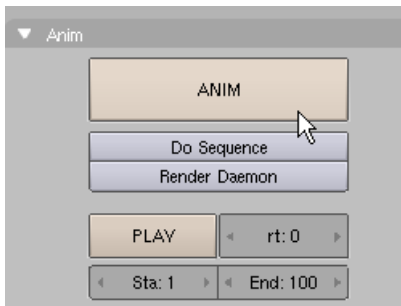
Select the directory in which you would like the QuickTime video rendering to be placed. Here I have chosen C:\Temp\. After selecting the directory press the Select Output Pictures button.



You do not have to name the file. Blender will automatically name the file 0001_0150.mov and place it in the output directory you have chosen.

Save your file CTRL-W.

In the Animation Panel press the Animate button. Blender will render each of the 150 frames and place the 0001_0150.movie file in the output directory.



When it is finished rendering the video you can play it by pressing the Play button or you can play the 0001_0150.mov file in your QuickTime Player.

A finished copy of this tutorial named TuftsTextComplete.blend is located in the TuftsText.zip file.