
Subject: Blender Question

Posted by [stonysmith](#) on Thu, 21 Feb 2013 14:47:59 GMT

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I have a question for any Blender Experts out there.

The attached part started as a truncated pyramid, which I then applied a set of Fillets around the edges. The problem is.. the sides are still "straight". The sides of this part need to have a slight curve outward. I'm attempting to make the cab for this:

<http://www.toytractorshow.com/AGCOcat.jpg> - as you can see, it's a very slight curve.

Here's my question: Is there a tool in Blender that would "squish" this mesh and cause it to bulge outward slightly, resulting in a curved surface?

I could easily slice the model to add vertexes in a horizontal plane, and then take those points and stretch them outward, but that doesn't give me a curve, and I'd like to avoid having to do that slicing 20 times or more to achieve a smooth curve.

I'm not looking for someone to "do" it for me.. if you could just tell me "how".

File Attachments

1) [Cab.stl](#), downloaded 61 times

Subject: Re: Blender Question

Posted by [stannum](#) on Thu, 21 Feb 2013 22:50:29 GMT

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Try PET mode or whatever name they gave it now. It was Proportional Editing Tool in the past. You select something then you transform it, and the vertices near the selection will be affected, but less (as per radius and fall off type).

Subject: Re: Blender Question

Posted by [Keymaker](#) on Thu, 21 Feb 2013 23:26:35 GMT

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You always need more geometry if you want to make curve.

You can add more loops with "CTRL+R" + mouse wheel (or numpad +) with one click if you have good topology and then just select middle one and with proportional editing turned on "O" create various type of curvature (you can change type of falloff).

Or use Lattice for changing shape of object

Subject: Re: Blender Question

Posted by [victorrings](#) on Fri, 22 Feb 2013 04:34:08 GMT

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if i were you i would use subdivision surfaces. this will give you easily controllable smooth edges and a natural way of controlling geometry. if you need help on how the modifier works - please let me know... if you are familiar with MAX it is a lot like meshsmooth.

chris

Subject: Re: Blender Question

Posted by [AmLachDesigns](#) on Fri, 22 Feb 2013 07:53:18 GMT

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I'm no Expert, that's for sure. But, following up on what the other guys have said (and learning along the way):

1. The Loop Cut and Slide (Ctrl+R) I do not think will work with the geometry in the .stl file;
2. As mentioned, If you had the extra horizontal vertex loops you mentioned that you could add, you could select an entire loop, turn on Proportional Editing mode (a radio button in the viewport header or available from the Mesh menu) adjust the Falloff and the size of the effect (middle mouse button) and then scale the edge loop;
3. Add more mesh density, either by the extra horizontal vertex loops or by using the SubSurf Modifier (although I think this latter Modifier will change your whole mesh wish I'm guessing you don't want). Then set up a Lattice Object and use the Lattice Modifier. I have never used this (didn't even know about it until this thread) but just watched this video and think it looks exactly what you need. I recommend the tutorials by this guy, Neal Hirsig, to everyone.

In any case, I'm pretty sure you'll need to add more mesh to do what you want to do in Blender.

Good Luck

Subject: Re: Blender Question

Posted by [Dragoman](#) on Fri, 22 Feb 2013 12:12:37 GMT
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I would try to "Subdivide" (in the edge tools) the edges that should be curved. The Blender subdivide tool has a "Smooth" parameter that allows for flat or curved subdivisions. At 0, the edge remains flat, around 1 it usually gives a smooth transition to nearby surfaces. Also try toying around with the number of subdivisions.

Greetings
Dragoman

Subject: Re: Blender Question
Posted by [AmLachDesigns](#) on Fri, 22 Feb 2013 12:31:16 GMT
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Nice tip!

Subject: Re: Blender Question
Posted by [Mswlik](#) on Fri, 22 Feb 2013 12:59:13 GMT
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If its a seperate object you could also try using a bezier curve then convert it into a mesh and extrude it.

Subject: Re: Blender Question
Posted by [Fredd](#) on Thu, 14 Mar 2013 20:24:50 GMT
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This technique might be what you after Stony:
<http://wiki.blender.org/index.php/Doc:2.4/Tutorials/Modeling/Surfaces/Skinning>
It is sort of an old technique

edit:fixed link

Subject: Re: Blender Question
Posted by [Keymaker](#) on Thu, 28 Mar 2013 10:27:24 GMT
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Fredd wrote on Thu, 14 March 2013 20:24 This technique might be what you after Stony:
<http://wiki.blender.org/index.php/Doc:2.4/Tutorials/Modeling/Surfaces/Skinning>
It is sort of an old technique

Also we have "new" technique
http://wiki.blender.org/index.php/Dev:Ref/Release_Notes/2.64/Bsurfaces_1.5

Subject: Re: Blender Question
Posted by [AmLachDesigns](#) on Thu, 28 Mar 2013 14:13:02 GMT
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Interesting links - has anyone used the BSurfaces Add-on? Is it as complicated as it looks?

Also any tips for the best way to upgrade Blender to later releases?

Subject: Re: Blender Question
Posted by [Dragoman](#) on Thu, 04 Apr 2013 14:48:02 GMT
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AmLachDesigns wrote on Thu, 28 March 2013 14:13
Also any tips for the best way to upgrade Blender to later releases?

I have had no problems upgrading Blender versions (I have been working for 1 1/2 years with it and done 3 or 4 updates). Download, unzip, install (if you use a variant that needs installing). I have not yet had any problems opening and working in a new version with files created with older versions.

Generally, look and feel also remain quite similar, so you can continue to work as before.

One thing to look out for is that Blender now allows polygon surfaces - it only had triangles and quadrilaterals before. Some shapes (e.g.cylinders) now default to polygons.

Greetings
Dragoman

Subject: Re: Blender Question
Posted by [AmLachDesigns](#) on Thu, 04 Apr 2013 16:29:23 GMT
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Thanks.

What about the older version of Blender? Does it get overwritten or does it stay on the system as an older version? If the latter, once you are happy with the new version can you just un-install the older version without out losing files?

Thanks again.

Subject: Re: Blender Question
Posted by [Dragoman](#) on Fri, 05 Apr 2013 13:09:18 GMT
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I must admit I have always used the version that does not need installing (for Windows).

I had no problem using them side-by-side. Though probably a model that uses a new feature won't be usable with old version.

Greetings
Dragoman
