

Poser & Bryce **CREATE A SCI-FI CHARACTER**

Artist **PROFILE**

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COUNTRY: UK

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Adam is a freelance illustrator who has worked for high-profile clients. His high-quality imagery is used in entertainment, editorial/publishing, advertising, scientific and medical industries. His personal love is still sci-fi art. www.kromekat.com

DVD Assets

The files you need are on the DVD

FILES: BGProp

FOLDERS: Daz Models

SOFTWARE:

Poser 6 (Demo)

Bryce 5.5 (Demo)

Tips and techniques for creating a classic sci-fi character image using budget 3D software, by **Adam Benton**

There's something of a tradition within the various genres of science fiction and fantasy, for glamorous females to be at the forefront of the story, whether it be in a film, book or artwork. A strong female lead heroine appeals to both men and woman alike – the ability to fight an assortment of alien foes with futuristic hardware (as well as her fists), balanced with an ability to remain sexy, often with unfeasibly well-kept hair and make-up, is a winning formula.

There are many examples of this imagery in sci-fi art. I'm going to show you some of the techniques and tools commonly used by digital artists in this genre. I'll use the popular budget 3D software packages, E Frontier Poser and Daz Bryce, for the bulk of the tutorial and Photoshop (or a similar 2D image editor) to add the final refinements.

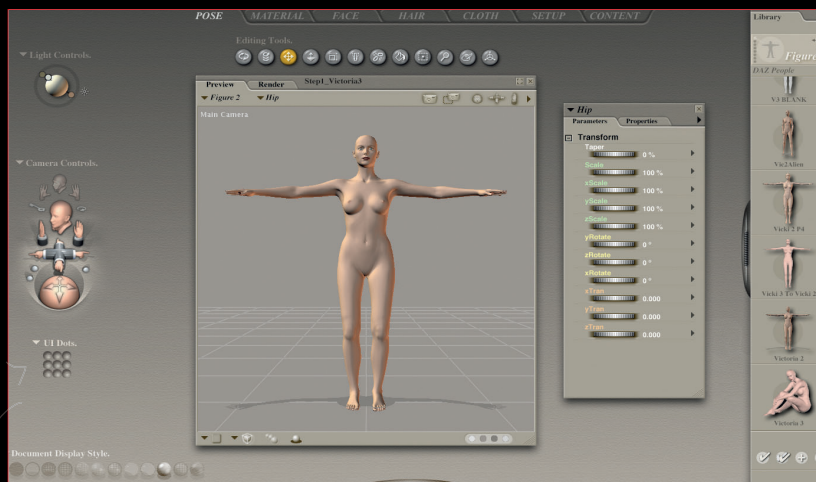
I'm not a great fan of 'repeat every step I take to create exactly the same image' tutorials. My preferred approach is to explain the basic choices, techniques and

artistic reasoning behind certain methods and tools, which you can interpret and expand for use in your own sci-fi character images.

And finally, to accompany the tutorial, Daz 3D has generously provided some of the items that were used in its creation for you to apply to your own sci-fi art. On the DVD you'll find Daz's premier female Poser model Victoria 3, her advanced face morphs, the Flip Hairstyle prop and a complete sci-fi costume to dress her in. See page 100 for our Daz upgrade offer...



In depth: Create a sci-fi babe



1 Choose your model

Begin by choosing which Poser figure is most suitable for your job. I've selected Daz's Victoria 3, because of her physical versatility and the abundance of third-party props and clothing available in online Poser content stores. I start by selecting and deleting the default figure in the Preview window, and loading Victoria 3 (provided on the cover DVD) from the Library palette on the right of the Poser layout.

2 Customisation tips

Next, I customise the figure using the powerful V3 face and body morphs. With Victoria 3 you can either install them in one go, or one by one. The advantage of installing the lot at once is that you can try them all to see the range of possibilities for customisation. I'd recommend this if it's the first time you've used a Poser model. A disadvantage is that the increased file size and complexity make it difficult to work with the 'fully loaded' figure.

I've chosen to 'Inject' the expression/feature morphs that I know I want to use, by clicking on the head of the Poser figure and browsing the list of morph categories available in: Poses>Poses>V3 All Morphs etc. I choose a selection of morph types to inject. I add simple morphs to alter the



angle of her brows, nose size and to part her lips slightly. I then add a skin texture I bought from Daz, to further customise her look.

3 Correct stance

I want to get the pose right before adding any props or clothes. Our heroine will be holding a gun in her right hand and a helmet in her left, and I want her to appear dominant, so I position the scene preview camera at a lowered viewpoint. I tilt her head and neck down a little and rotate her eyes directly at the viewer. You can click on each of the limbs in turn, and use the parameter dials to rotate, twist and move them into the required pose. Move things in small increments at first, then move back down the hierarchy (hand>forearm>shoulder, and so on) to make finer adjustments, to prevent any major mesh distortions.

4 Dressing your figure

The next stage is to add props and clothes. I've selected a few items from the Daz and Renderosity stores, including a bodysuit that had morphs to allow it to be unzipped at various points. To add an item of clothing, browse the Figures heading in the Library palette. Choose and highlight the item and click on the 'double tick' button. To fit the item to her



body, I select Conform to... from the Figure menu. In the small dialog box that opens, I select Figure 1 (your character base model) and click OK.

5 Adding 'smart props'

This process needs to be repeated for each item of clothing. Some items, such as the gun, are 'smart props', and they're automatically placed in the right location and locked to the hand's movements ('parented'). I just need to wrap the hand and fingers around the gun's grip and trigger, which is best achieved by moving each of the digits in small increments.

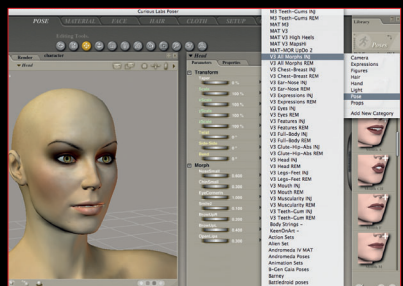
6 Final touches

Our heroine is fully clad. When layering clothes in this way, the meshes can become intersected, allowing inner garments to show through. We can partly rectify this by scaling up the outer items a little. I've chosen a hair model (you'll find the 'flip' hairstyle on the ImagineFX DVD and given her a helmet prop under her arm. I don't conform it; I move it into position using the Transform tools (xTran etc).

PRO SECRETS

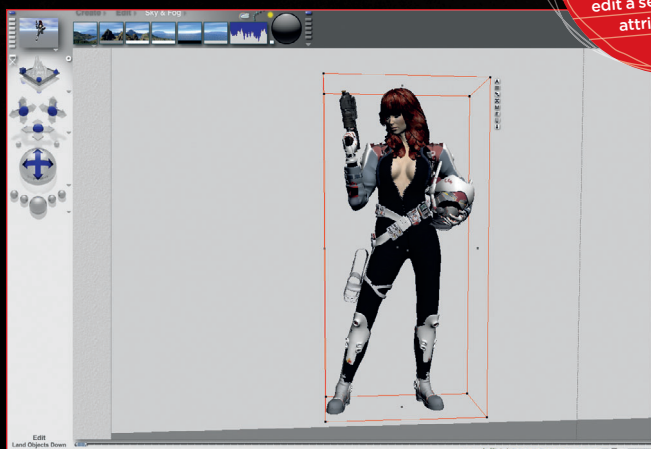
Natural poses

Posing a figure naturally is made much easier if you use a reference of some sort. This can come from many sources. In this case, I asked my wife to model for me, giving her a little direction as to what I wanted to see. As well as giving me some unique photo references for the correct lines and weight of the pose, I could ascertain what was comfortable, balanced and natural in reality.



Workshops

Shortcuts
Edit attributes
Ctrl+Alt+E (PC)
Apple+Alt+E (Mac)
Use this shortcut to quickly
edit a selected object's
attributes within
Bryce.



7 Removing elements

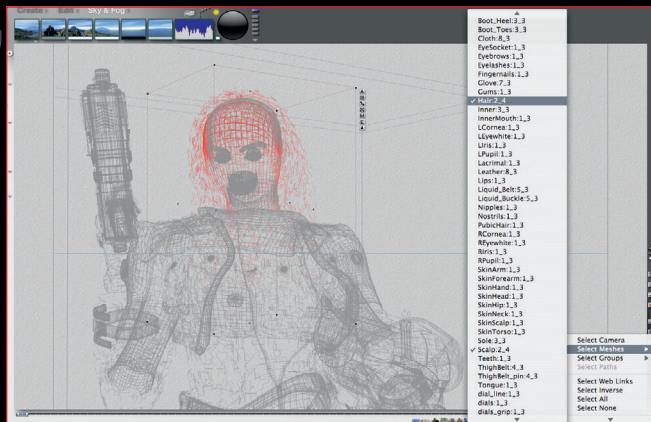
To export the model to Bryce for scene setup and rendering, I select File>Export>Wavefront OBJ. In the Hierarchy Selection dialog that follows, is a list of model elements. I remove parts that will be obscured by outer layers, such as hands hidden by gloves.

8 Importing to Bryce

I open Bryce, select File>Import Object and in the dialog box I navigate to the model exported from Poser. Bryce will import the object. Poser will automatically create a material reference file (.mtl). This prompts us to direct Bryce to the Poser items' textures, so it can load them in with the mesh. If they don't load, the textures will be within: Poser/Runtime/Textures/... directories. Once imported, I lower the figure using the small arrow beside the selected group.

9 Editing textures

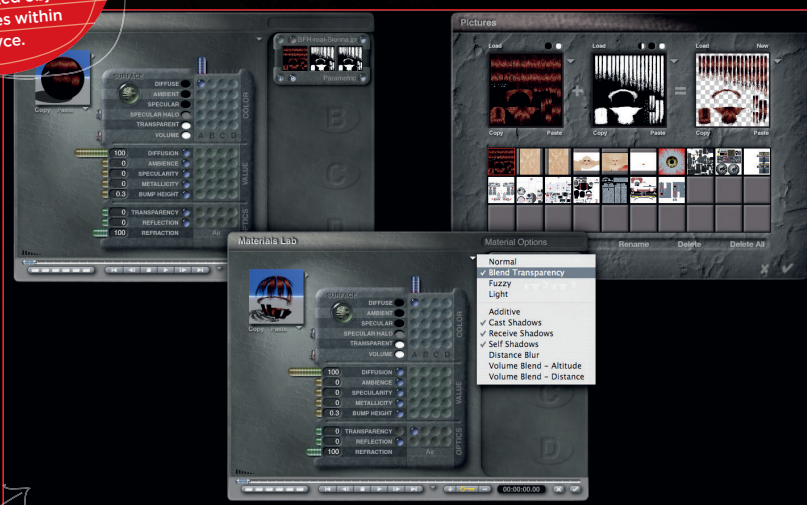
The textures will look fine, but the transparency in the hair, eyelashes and eyebrows will be missing. In the bottom right of the interface is the Select palette, and at the end is a dropdown arrow



PRO SECRETS

Plop rendering

Use the 'plop render' function often. This will save a lot of time, because you can simply select and render the small area you're working on at the time. To activate this function, make sure the sixth icon down the right-hand side contains a red rectangle (active). Click and drag a box/marquee on your render, and click the spheres next to it to render that area.



enabling us to select items in the scene. I need both parts of the hair, so I select the hair, hold Shift and re-enter the menu and click on the Scalp. I can edit both as one item as they share a texture map.

10 Into the Materials Lab

With these two items selected (red) I click on the small M next to them. This opens the Materials Lab, where I can alter the settings of the items' textures. I click on the second small 'glass bead' on the right, to open the Texture Source Editor and import the hair's transparency file into the middle image channel. I click Load, and navigate to the appropriate transparency map for the hair model. I return to the Materials Lab and make sure there is a small blue bead in the transparency channel A (click in that area) and Blend Transparency is selected. I repeat the selection and material editing process for the brows and lashes.

11 Readymade background

On the DVD, I've created a sci-fi set model already imported into a Bryce file, so it can be merged with your character file. Go to: File>Merge and navigate to the BGProp file. The background will be loaded into your scene. You may need to scale her up and lower her set position.

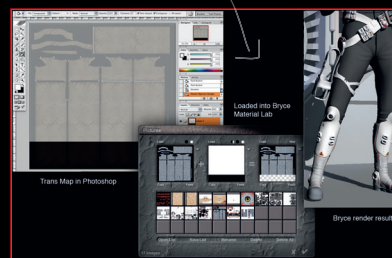


12 Transparency maps

Some of the bodysuit will poke through the boots but we can't delete the suit lower leg mesh because the boots aren't tall enough to cover the area. The solution is to use a transparency map to make the area below the boot-top render invisible. We must locate the texture map in Poser's Runtime directory, and open it in a 2D image editor, such as Photoshop. I create a new layer, fill it with white and make a rectangular marquee selection in the lower area, about where the lower leg part of the map is. This is saved as a greyscale jpg file. Back in Bryce, with all of the bodysuit mesh parts selected, I enter the Material Lab>Texture Source Editor (as in step 11), and load the transparency map, just created, into the middle picture box. This removes the bottom of the texture map.

13 Ambiance and depth

Lighting helps define a mood and give depth. The BGProp is set up with three white downward spots to pick out details in the model, and two red omnis in the locks to create atmosphere. A blue omni in the central portal depicts ambient light entering from outside. We can give the model her own light setup to pick out details and create even more mood and definition.



In depth: Create a sci-fi babe

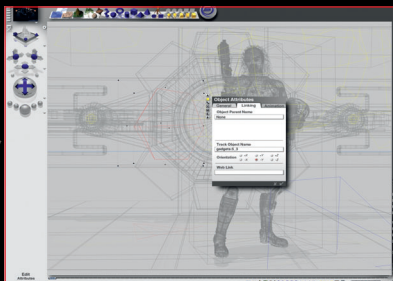


14 Sky lights

In the Sky & Fog mode in Bryce, I enter the Sky Lab and choose Starfield sky preset, with Disable Sun Light selected. This adds instant drama and atmosphere. Every extra light will reflect the atmospheric set lights, and focus the viewers' attention on our character.

15 Light direction

I start by adding a Spotlight in the Create mode. To control where this light shines, I link it to part of the figure mesh. I click on the A (attributes) next to the light, go into the Linking tab and from the Track Object Name dropdown, I select the belt, because this is a good central point.



16 Adding more lights

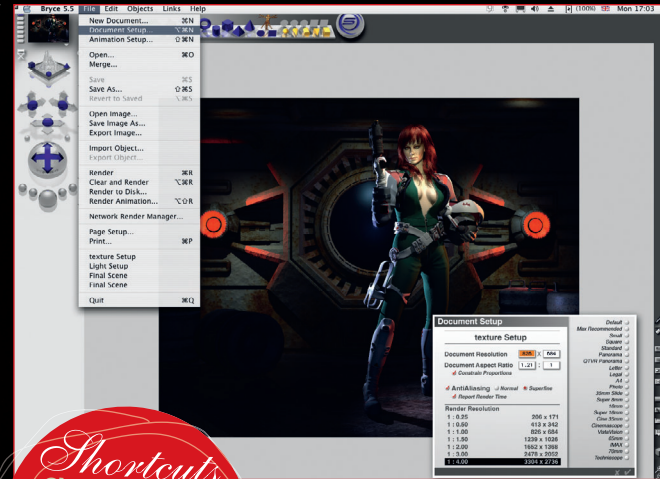
The first light is a cool blue colour to simulate light wrap coming from the portal, off to the left/rear. This helps to give sharp definition to her side, lifting her from the background. I duplicate this light and position it on the right, with its colour changed to a vivid red. This also defines her other side, and simulates

light wrap from the red lock behind her. One more duplication places the light above her head and to the front, with its linking set to her chest. This suggests some main overhead lighting. Another duplicated spot, set to a warm pale orange, is linked to her face, to show her features. A dimly lit, grey omni is placed in the front of the scene, to act as a global/frontal fill. All of the spots use 'fall off' to define how far they cast light, preventing too many confusing floor or background shadows.



17 Tileable textures

Some of the elements still need texturing. For the BG prop, I choose a tileable (repeats with no visible join) texture of rusty painted metal, and a similarly grimy old metal panel texture for the floor. This makes the place look aged and richer in character. I select the groups and each mesh element as before, and edit each texture by clicking on the M next to the selected object. Now that she is lit, I tweak the colour of her bodysuit, and give it some 'bump' detail in the Materials Lab.



Shortcuts
Change tool size
Use the [] keys in
Photoshop to quickly
increase or decrease
your current tool/
brush size.

18 Final Bryce tweaks

I tweak my composition in Bryce with the camera navigation tools on the left of the screen, then adjust the light intensity and colour, soften their edges and alter fall off values. I add a second small fill light to her face, slightly to the front, to define her features. I select Document Setup from the File menu, and choose a resolution and ratio to render to. I tick Antialiasing to smooth out the pixels across the image.

19 Photoshop fine-tuning

Once the high-res file is rendered and saved, it can be opened in Photoshop for touch-ups, such as Smudge, Blur, Clone stamp, Dodge and Burn tools and an airbrush, to smooth out mesh artefacts/hard edges and repaint errors. I adjust Brightness and Contrast, duplicate the main layer, blur it by a few pixels, layer it over the base layer and set the screen at 30-50 per cent. This gives a diffused glow. A 1 or 2 per cent Gaussian, monochrome noise integrates it all and makes it feel more grainy and real.

