



**C3DE**

**CARRARA 3D EXPO MAGAZINE**

**Issue 06 - January 2011**

**Welcome to the best**

**of CARRARA!**

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I think you should use Hex to text conversion

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### Special Thanks

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Karma Composer, Eva Vomhoff, Carrara Lounge ([www.carraralounge.com](http://www.carraralounge.com)), The fine folks at DAZ, everyone who supported the e-zine and everyone else who helps to keep Carrara alive!

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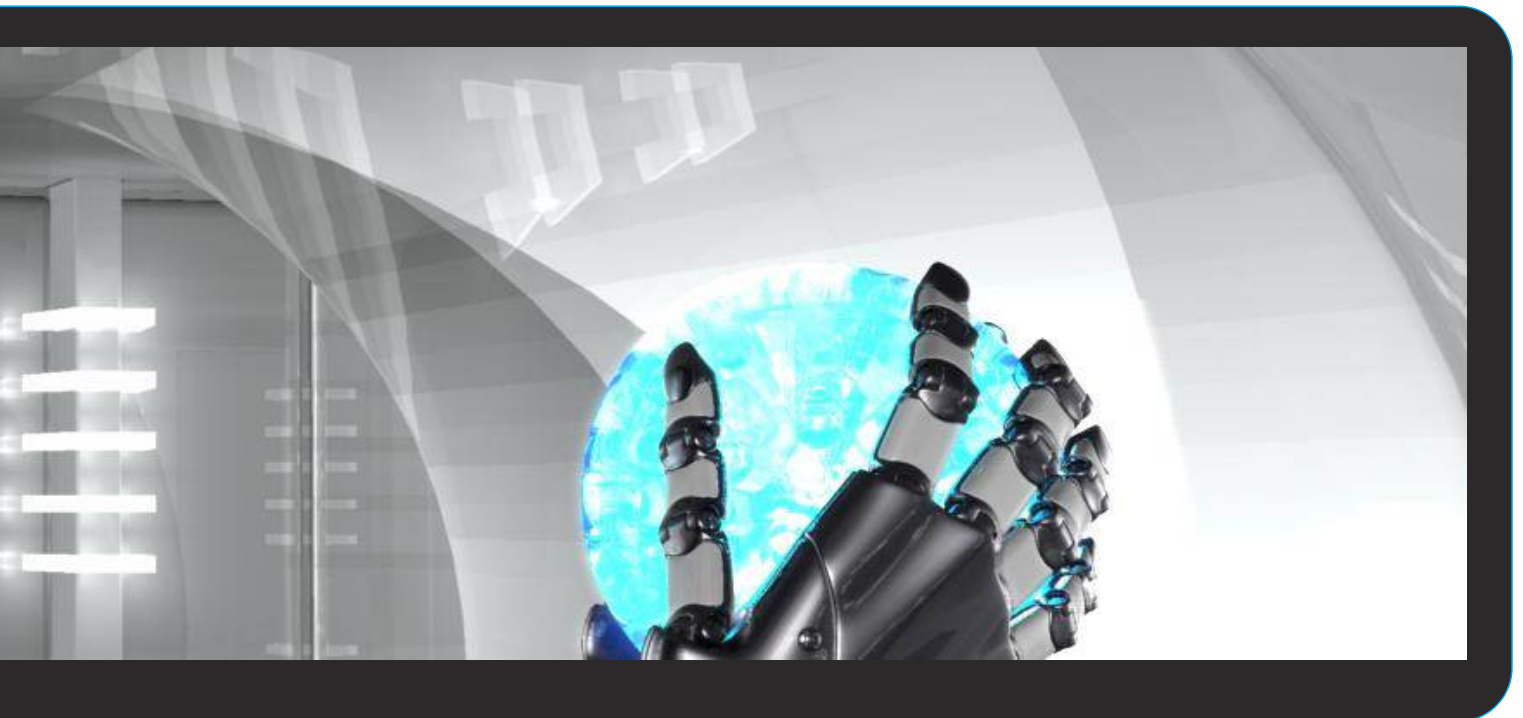


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Guest logged on

**Zikeo**

**7a696b656f**



**Robotics**

**Unleashed**

**meet the author**



**C3DE | Hello, Zikeo! Welcome to Carrara 3D Expo. Could you please tell us a bit about yourself and how you discovered Carrara?**

**Zikeo |** Hi, all. I started my discovery and love of working with my hands at the early age of about 4, and by the time I went to school, I was drawing Dr. Who baddies for all the other kids. I would do anything from model kit building to drawing and painting. Although things have changed over the years, I would always come back to the drawing and painting. Only now 3D has become the drawing and painting.

I first started with 3D in mid 2005 when, after purchasing my first computer earlier that year, I found myself walking out of a well known magazine shop with £12.00 worth of computer arts mags. I could barely turn the thing on, and I was spending money on computer mags. On one of the mag discs was a copy of Amapi 6 by Eovia. The mag had a 2 page tutorial on how to model a kind of yo-yo thing. Due to my lack of computer use, this project took 2 weeks of evenings.

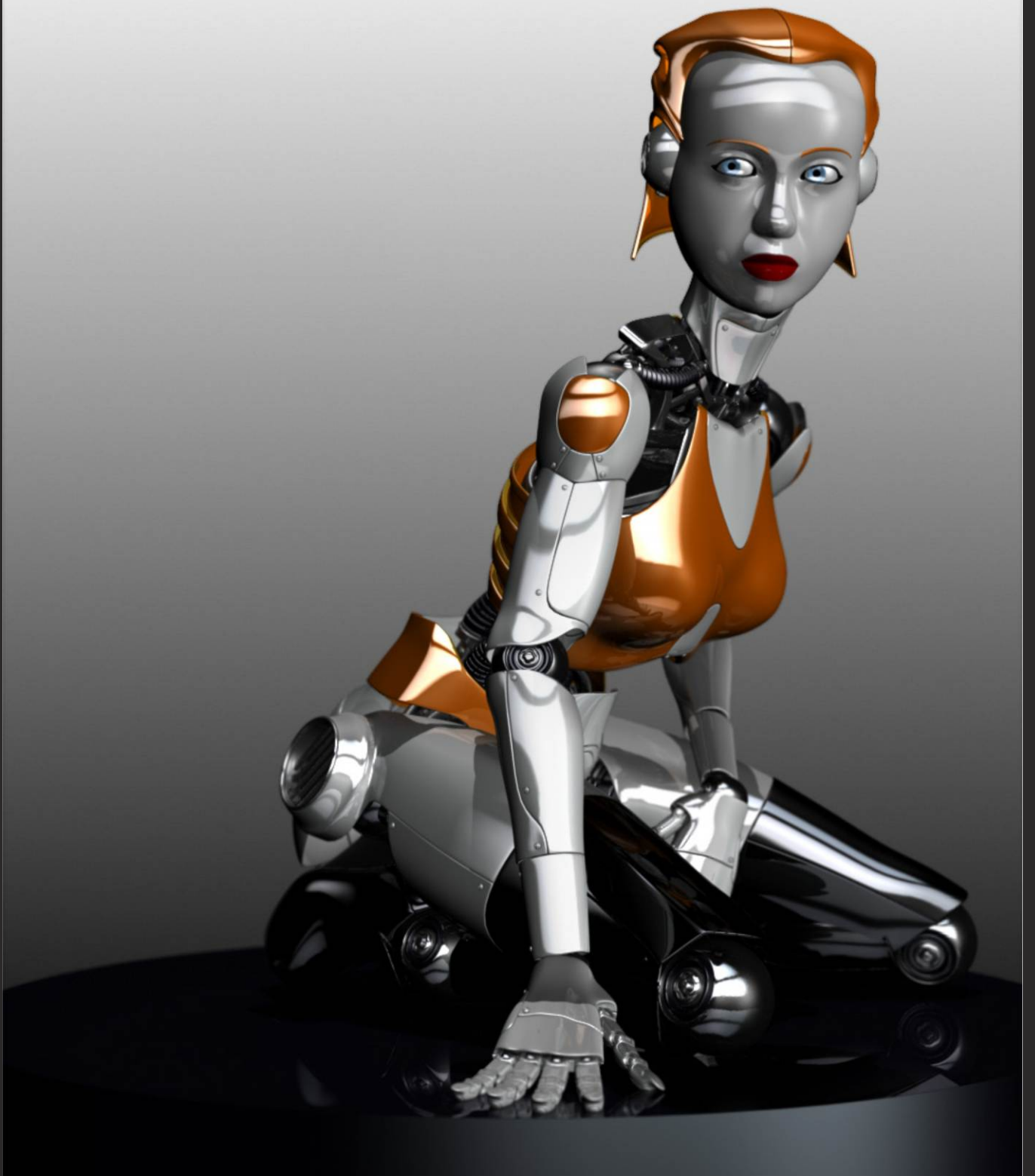
Two weeks! Something had grabbed me, and I persevered. Over the following months my modeling ability improved, and I had a rebate from a banking mistake 10 years earlier.

This gave me the funds to purchase Carrara 4 that happened to be bundled with Amapi Designer 7. Although I was interested in Carrara, Amapi D7 was the main reason for the purchase, but Carrara soon proved to be a good bedmate.

**C3DE | From your gallery at Renderosity, I see that you are a big fan of comics as well as sci-fi. You've got everything from Flash Gordon to Robocop and quite a bit in between. Pretty cool stuff. Obviously, the comics themselves inspire you, but what drives you to create these remarkable images?**

**Zikeo |** 2000AD and Judge Dredd have been a staple diet of mine since 1977 as well as lots of now infamous British spin offs: Warrior, V for Vendetta, Camelot 3000, Watchmen, etc. Since the appearance of collected volumes of the American publications, I have picked up some graphic novels. More recently, I have tried to keep modeling rather than wait for inspiration. This has meant that half way through a model, a light might snap on and inspiration and planning are forming as I model something completely different. One Sunday, I sat down at the computer with no idea what was going to happen, 4 hours later and 6 pairs of sunglasses/spectacles were completed for future use. I do find it quite a good exercise to model something you're not all that interested in and trying to make it look good or modeling incidental objects for future inclusion in scenes.















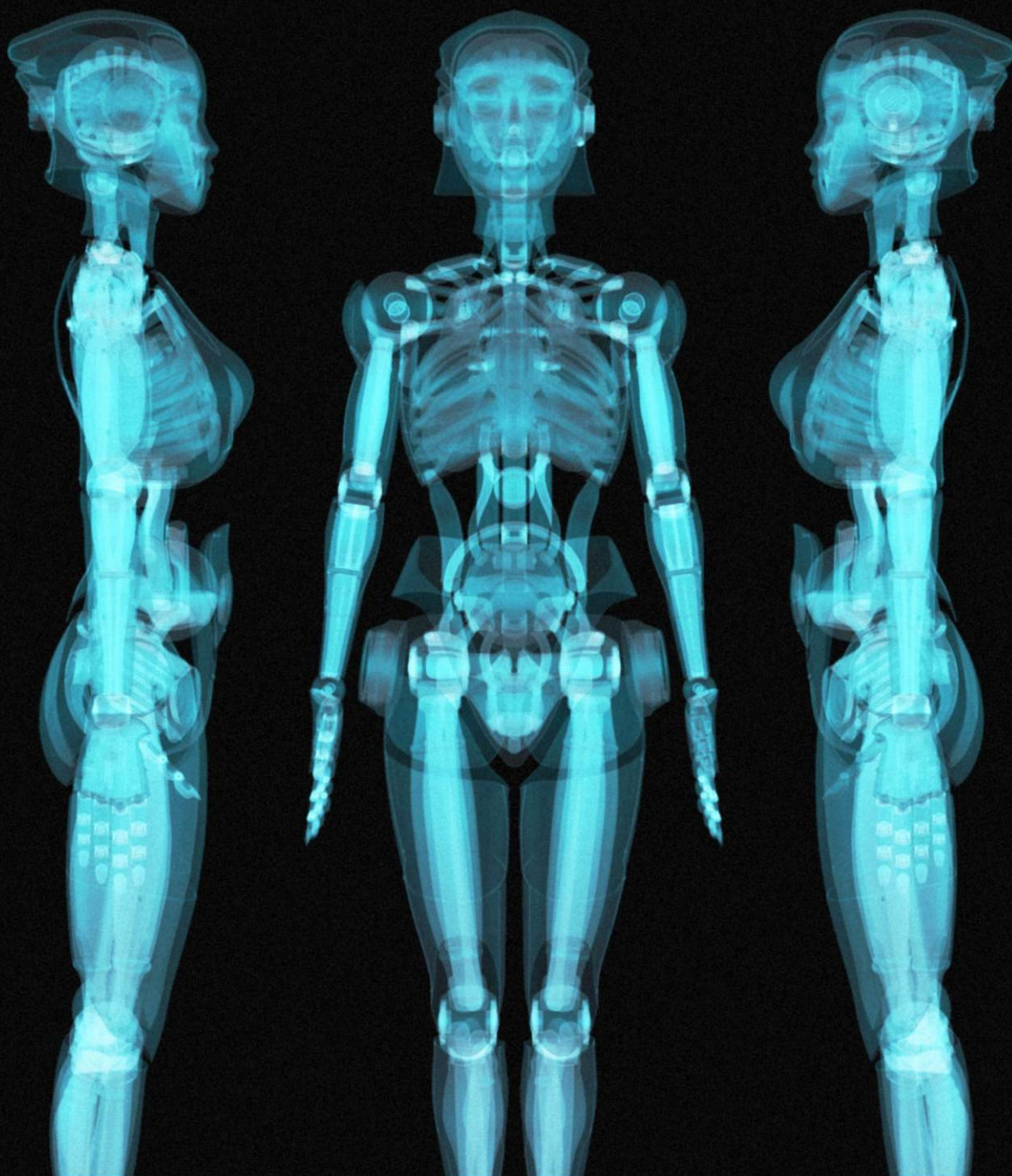
**C3DE |** In contrast to your mech and human comic characters, I found Mea Kasaki to be a charming change of pace. Could you tell us a bit about Mea and the process you went through to create her?

**Zikeo |** I wanted Mea to have a cute, light manga look about her and a more natural almost pear shape. I started by downloading a lot of oriental women's faces to get a good idea for the shape of her face. It was easy finding front elevation shots, but profile shots proved more difficult. In the end, I used a front shot of one girl and then rough sketched the profile myself, which seemed to work OK. I found some body profiles that were similar to the shape I was aiming for, so I used one as a guide to build the mesh. After which, I dropped the images out of the view port and adjusted her shape till I had something I was happier with. This was all done in Amapi D7 and then exported to Carrara.

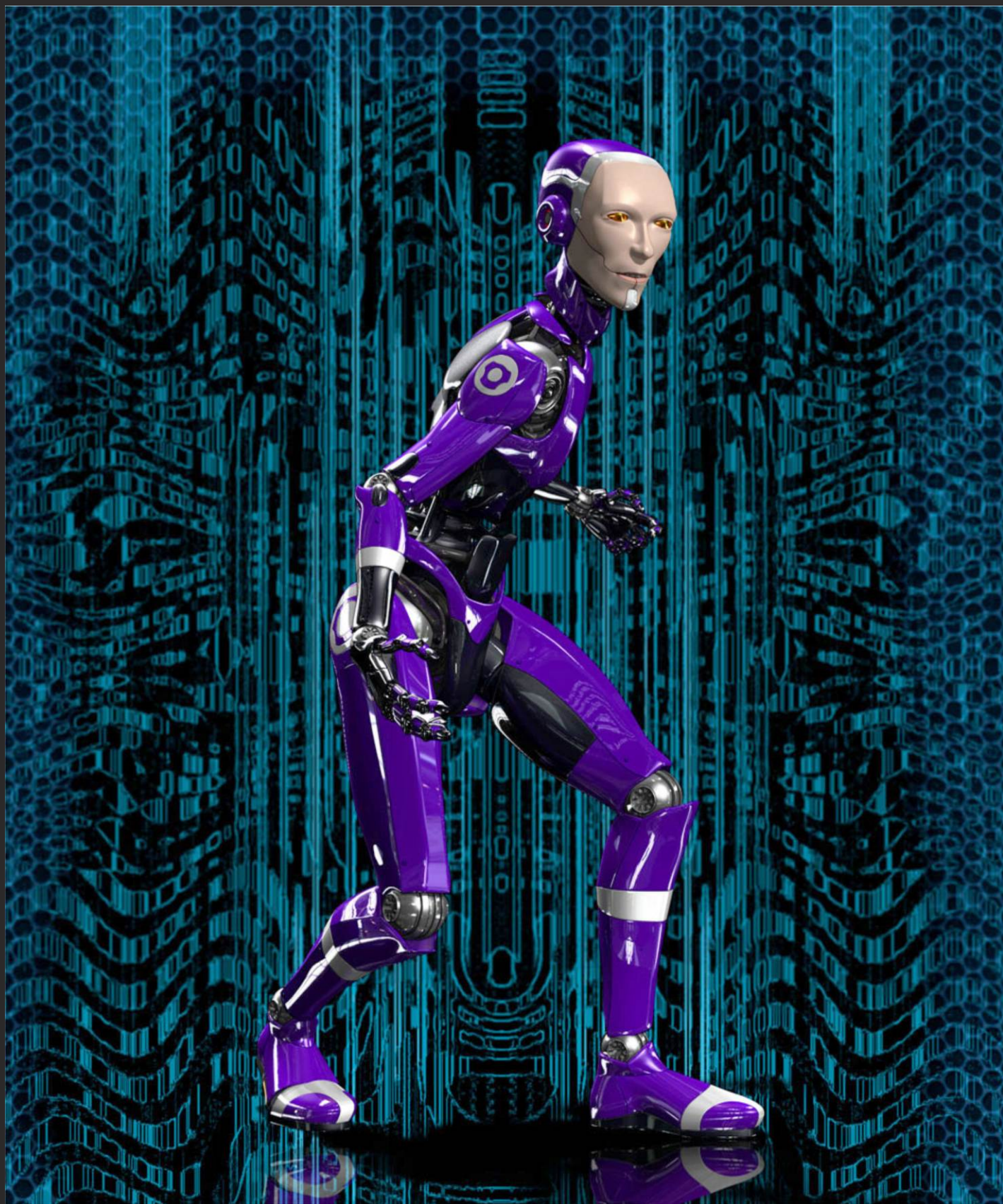
**C3DE |** I see that you use Carrara, as well as Amapi, in the creation of your images. How do these two programs complement each other in your work flow? Could you give some insight into your creation process using these two tools?

**Zikeo |** Amapi D7 and Carrara are, to me, a cracking combination. Hexagon, it could be argued, is the next step up from Amapi, but all the extra tools tend to bog me down. Almost everything that I do with Amapi can be achieved in the Carrara modeling room. I did do one figure using just Carrara which took about 3 weeks of evenings and 2 weekends. This could have been shortened by a week if I had started the project with Amapi D7. I think Amapi suits me. You can set it to have all its tool buttons displayed on screen, so they are just a click away, but I still never use them all. Once I am happy with the model as it stands in Amapi D7, I will export it as an .obj file and import it into Carrara for mesh tweaks, UV mapping (if necessary) rigging, skinning, painting, morphs, etc. After which, I will export the finished item and then drag it into my objects folder to languish until required.





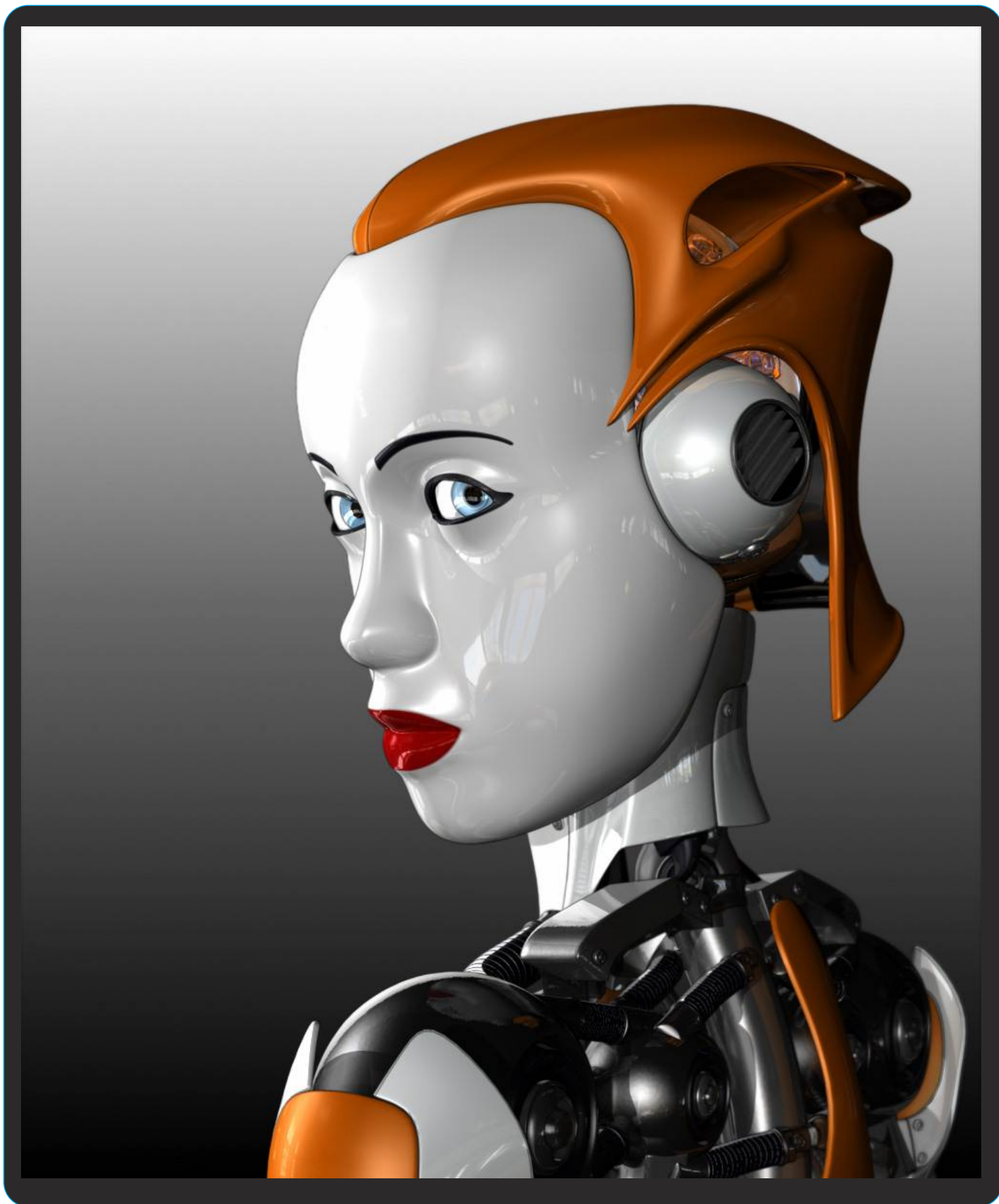
















**C3DE | Have you tried any other 3D software packages, if so, how does Carrara compare to them?**

**Zikeo |** Carrara, to me, just seems an obvious choice with the different rooms for different jobs.

Years ago my kid brother was into a bit of peer to peer downloading. (Thankfully not any more) Whilst he was though, he did download Maya and Max for me to have a play with.

I installed them both and within the week I had removed them. I moved back to Carrara thinking, "I've just wasted a week when I could have produced something". I have purchased Silo, but that is more as a replacement for Amapi D7. If, for some reason, I am unable to get it to work on a newer operating system.









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**C3DE** | You've been using Carrara for quite a while. Are there any improvements you'd like to see made in Carrara?

**Zikeo** | Ah, yes. My main gripe with Carrara is that there is no Poser export for the Carrara rigged figures. I do have the tools to do the job in Daz Studio, but it is so complicated in comparison to Carrara's rig and skin functions. Cloth would also be a nice addition as well as improved displacement painting.

**C3DE** | Your images really show how Carrara can be used to create professional quality images. In your opinion, what are Carrara's strong points as a tool for professional use?

**Zikeo** | Thank you for "Your images really show how Carrara can be used to create professional quality images". I'm purely a hobby guy and have not done any professional work.

**C3DE** | What are your favorite tools in Carrara?

**Zikeo** | All the tools I normally use are my favorites. Although Carrara is great at surprises when you think, "I wonder how I'm going to do that?", and you find Carrara has the ability already.

**C3DE** | Is there anything else you'd like to tell our readers?

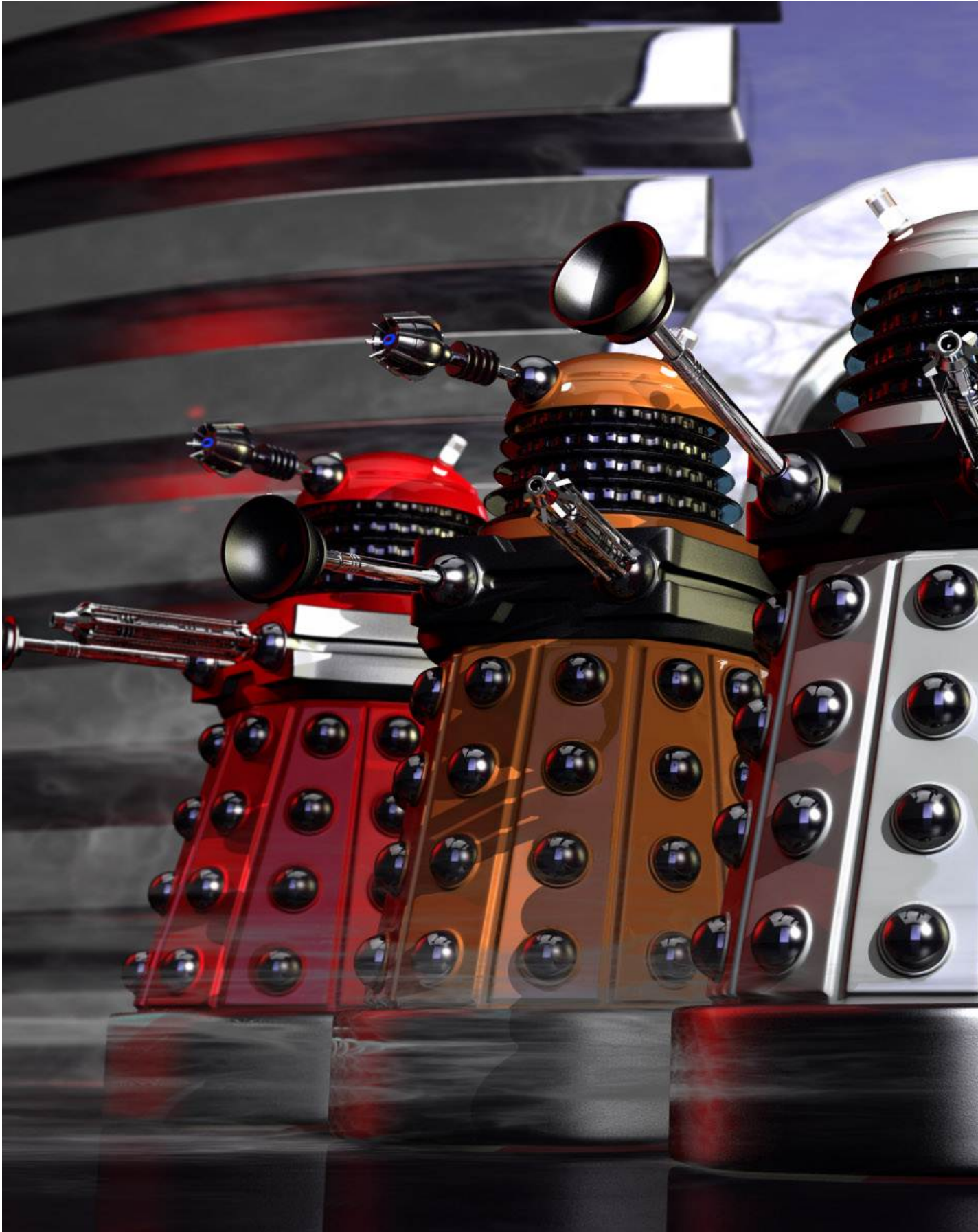
**Zikeo** | Thank you for taking the time to read and look at my meager offerings over the last 5 years.  
And good luck with your latest projects.

**C3DE** | Thank you very much for your time. Your artwork is amazing, and we at C3DE wish you all the best!

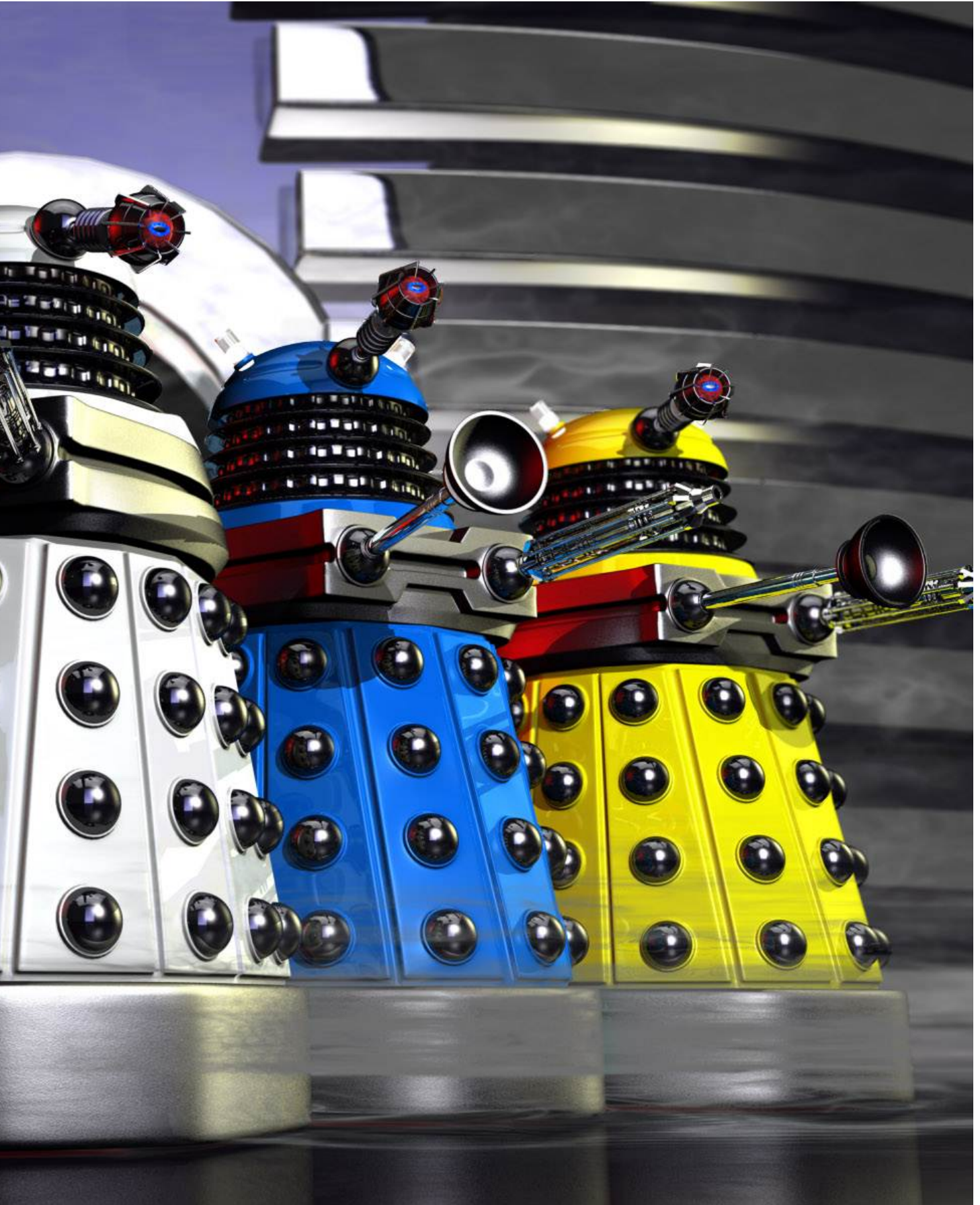








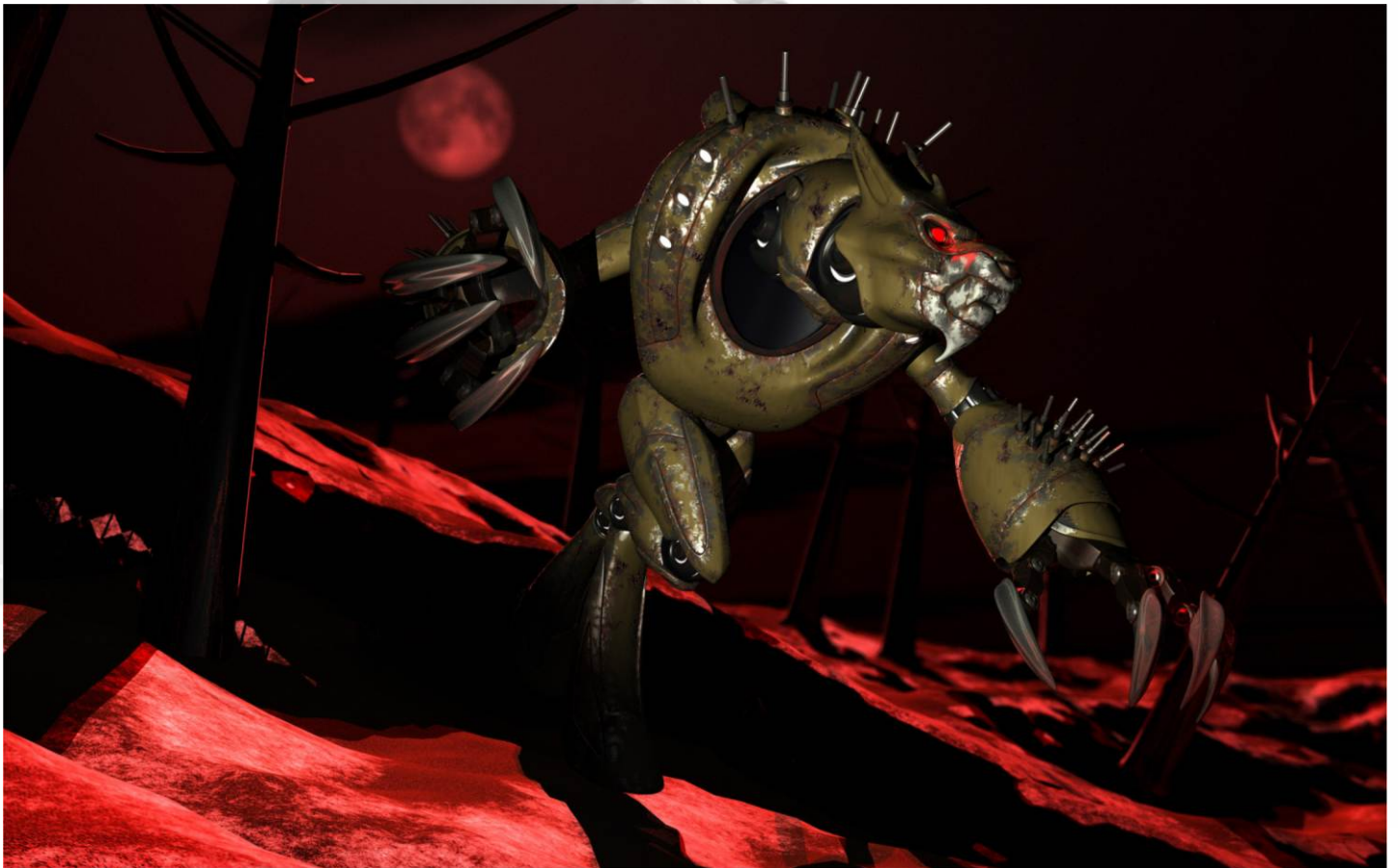


















**New tool**

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**by Inagoni**

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**inagoni**



It's been an exciting year for Carrara and the artists using Carrara. Plug-in developers didn't waste any time, after the release of Carrara 8, introducing new toys for Carrara artists to play with. Well known plug-in developer, Inagoni, presented us with a brand new plug-in for Carrara called Shaper.

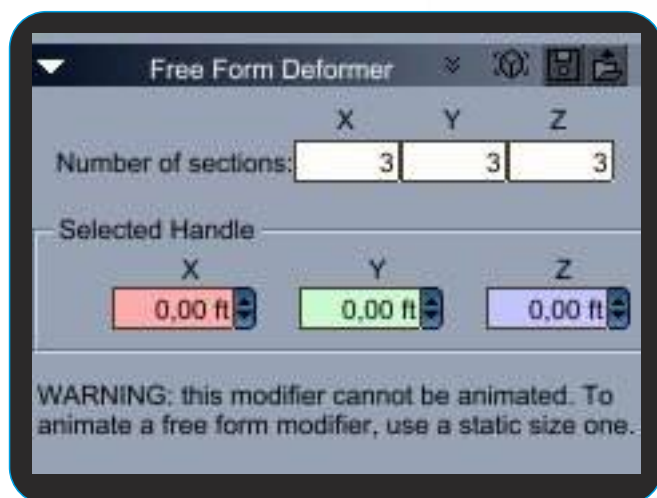






Inagoni adds free form deformation (FFD) functionality to Carrara with this new and exciting plug-in which everyone can get for the low price of \$25. Shaper is a very handy deformer that gives you the ability to deform any geometric object using a cubed grid of points. Organic shapes can now be created in Carrara with ease!

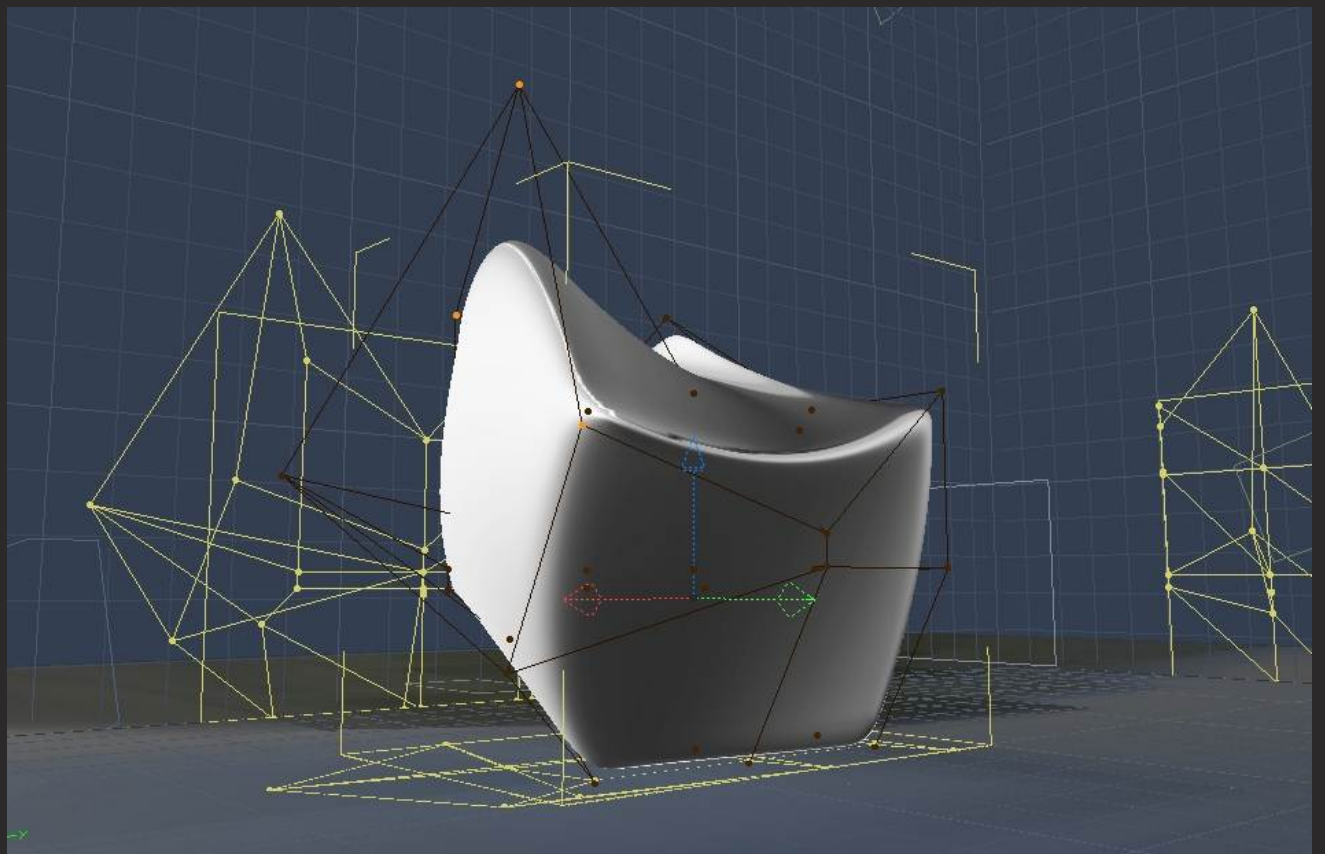
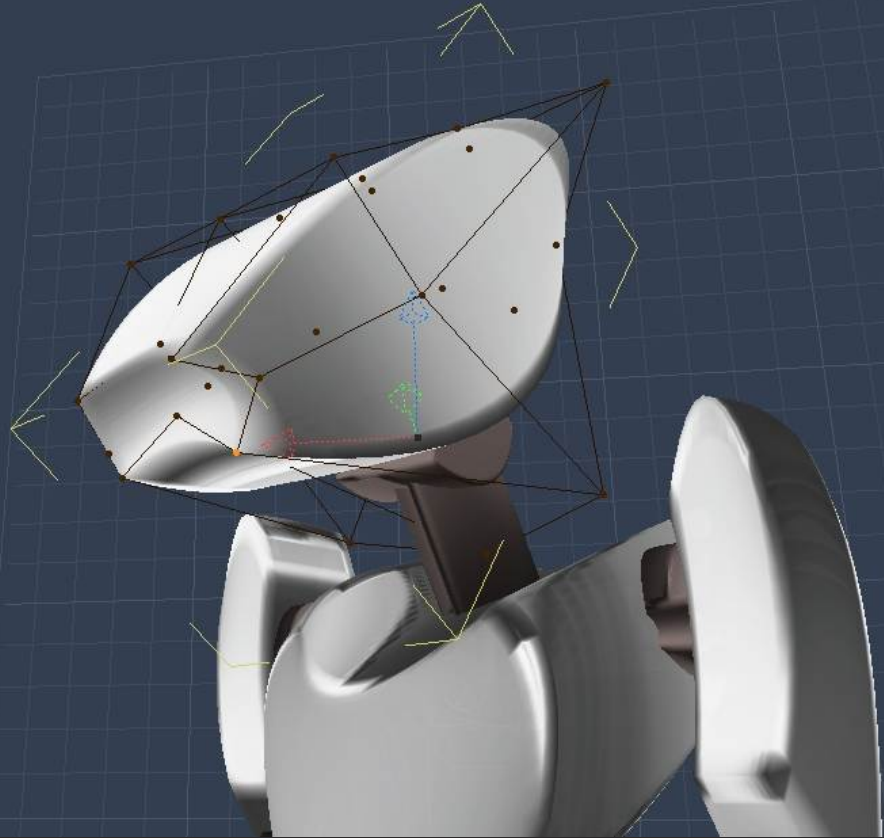
Once installed, Shaper can be found in the Inagoni menu in the Modifiers list. It provides four options: a free form deformer where you can define how many segments the cubed grid will have (unfortunately this one can't be animated) and three other predefined FFDs (2x2x2, 3x3x3, 4x4x4). The predefined shaper deformer can be animated. This plug-in can create all kinds of shapes and can morph faceted shapes into organic ones. While it is a pity that the custom FFD can't be animated, Shaper can be applied on a figure that already has a shaper modifier to it. You can actually have as many deformer as you want applied to a figure as long as your computer can handle it.

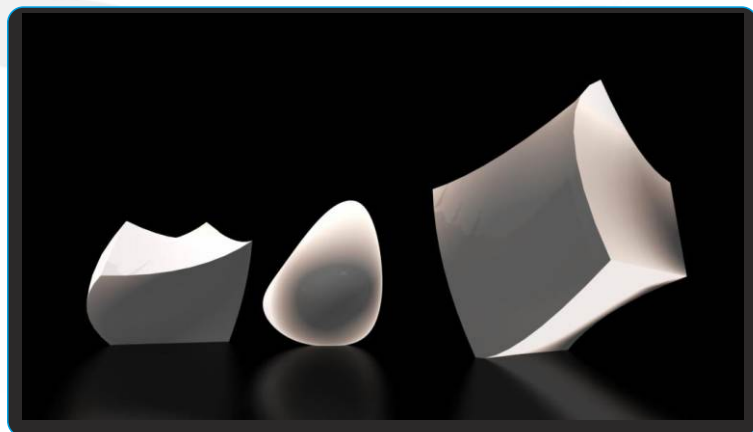
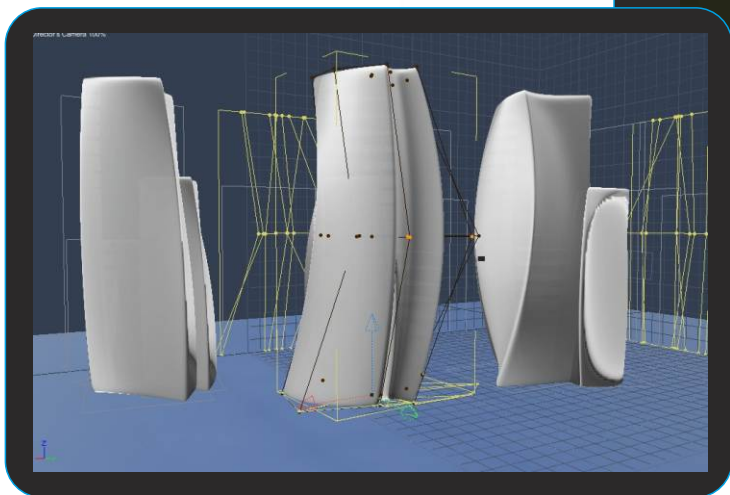


While Shaper can be used quite effectively as an animation tool, it also serves very well as a modeling tool. Shaper can be applied to any figure in a scene. Shaper is polygon sensitive and the more polygons the object has the smoother the deformation will be. In addition, dynamic subdivision adds a lot to the effect of the shaper deformation. People who like creating organic shapes in Carrara will enjoy the ease of use and flexibility of this new plug-in. It is also very useful for modeling architecture, allowing the transformation of hard lines into wonderfully curved shapes. Shaper works very well on grouped objects as well. If your figure consists of more than one object, you can easily modify and reshape the group as if it were one object.

Shaper runs the gamut of creation from abstract to organic and is great fun to use. It is a very straight forward plug-in. Shaper is so simple it doesn't even need a manual. Once it is applied, the user is provided with a cubed net of dots directly on the figure. That's all. Now you're ready to deform and modify your geometry to your hearts content.

Director's Camera 100%












**PyCloid**

**coming soon**

**A revolutionary master peace**

**By Frederic Rible**



**Showcasing the power of PyCarrara  
and bringing a new dimension to the dynamic world  
of Carrara 3D**



**Community for Carrara users**

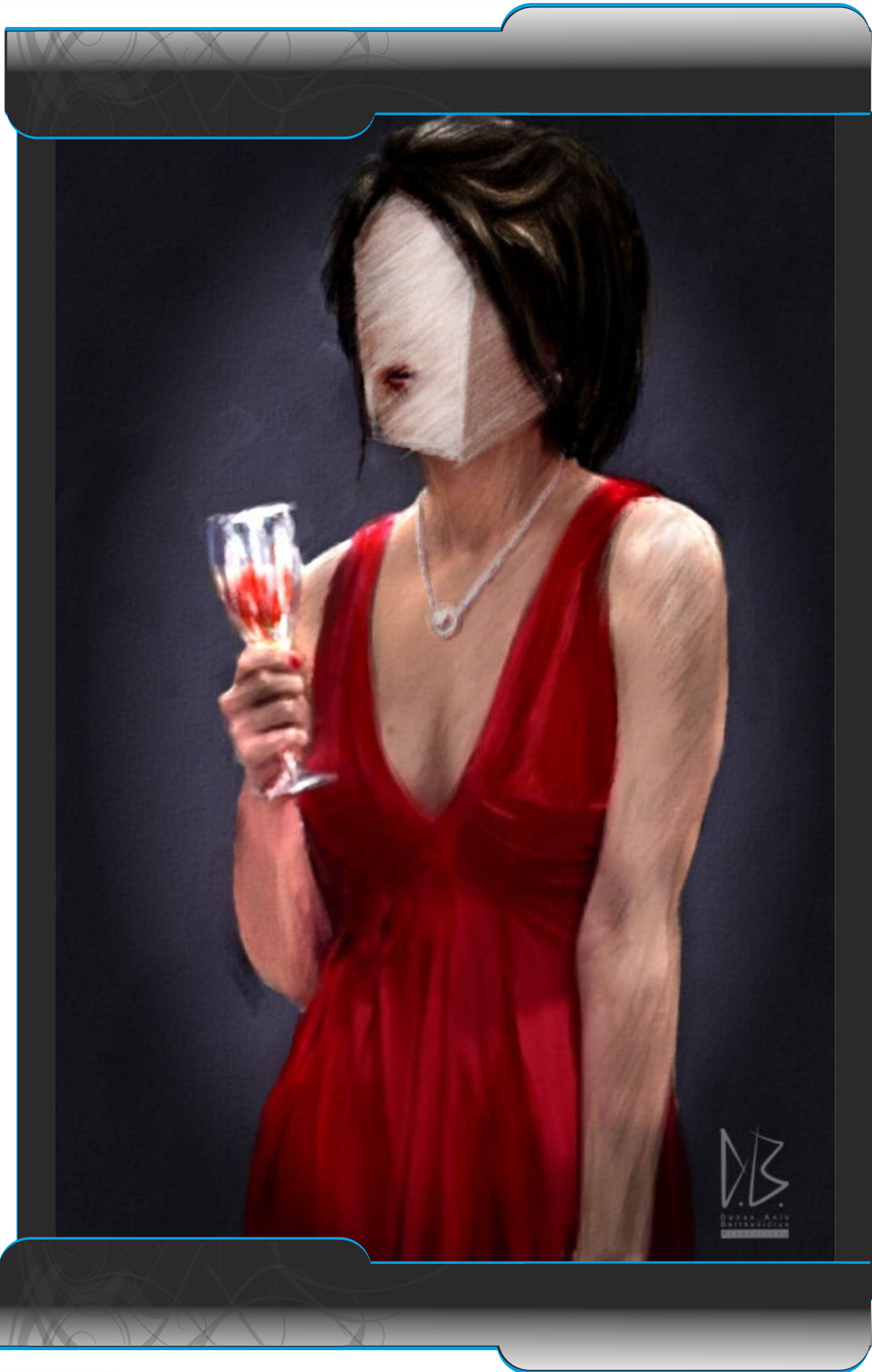
**Tutorials for Carrara users**

**Resources for Carrara users**

**[www.carraralounge.com](http://www.carraralounge.com)**

**Check it out**



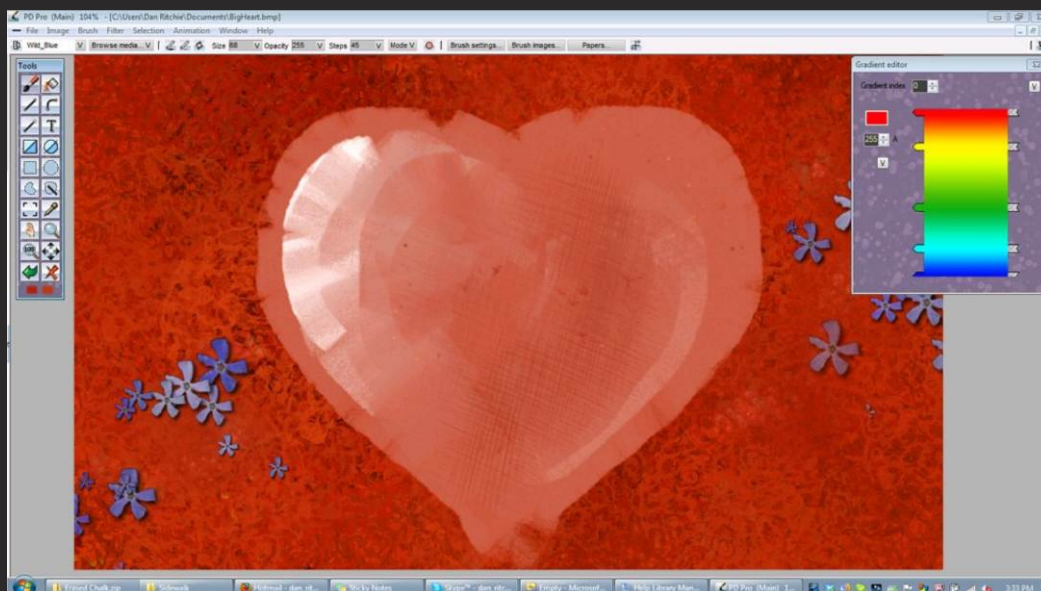


# PD Pro 5 | Beyond digital painting

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After having some fun with Project Dogwaffle Pro's newest version, I have to say, PD Pro 5 is amazing! There doesn't seem to be anything this extremely versatile and unique piece of software can't do. From drawing and painting to animation and special effects, this program does it all and does it well.

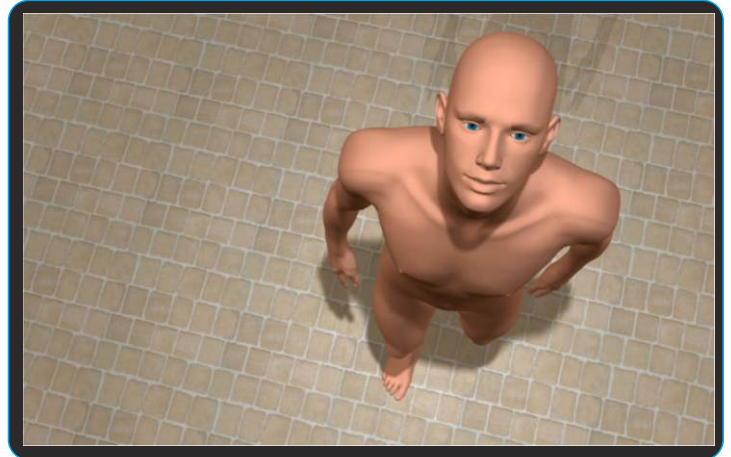
PD Pro 5 is not another Photoshop clone. Indeed, it is very much its own program. This new version has taken what was a very capable program and made it more powerful and user friendly by adding a long list of new features and a very clean UI. The program loads fast and fits nicely on a laptop screen with fewer floating panels to clutter the workspace. This lean interface is fully customizable. Artists can move or remove panels to their hearts content, creating the perfect workspace, while still having access to all of PD Pro 5's countless features through traditional drop down menus.





The more you use PD Pro 5 the more you begin to feel as if you are painting on a canvas instead of a computer screen. PD Pro combines the feel of traditional painting and animation with modern technology, giving you the control and workflow you desire as a traditional artist along with the ease and versatility of a top notch paint program. PD Pro 5 makes work for 3D artist easier as well. With its new symmetrical painting feature, 3D artists can create patterns and texture maps in no time at all. With all the time saved, 3D artists can make use of PD Pro's many filters to create that perfect texture.

## Adding painted life to plastic David 3 with PD Pro 5

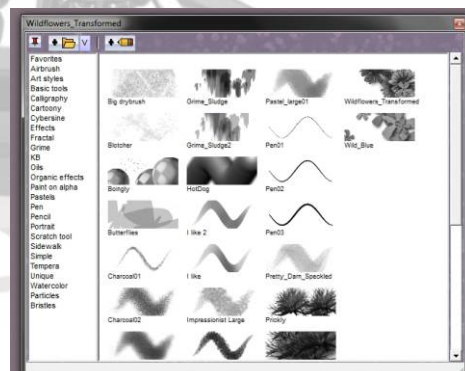
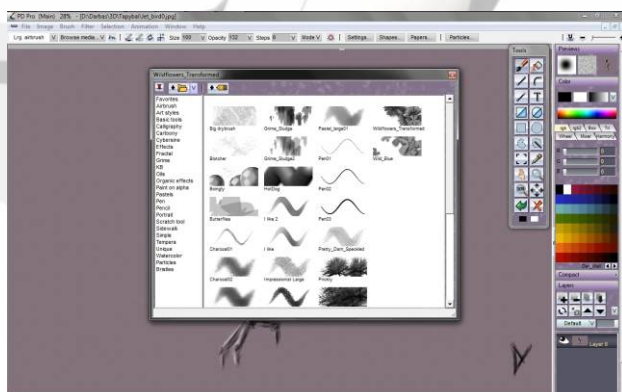


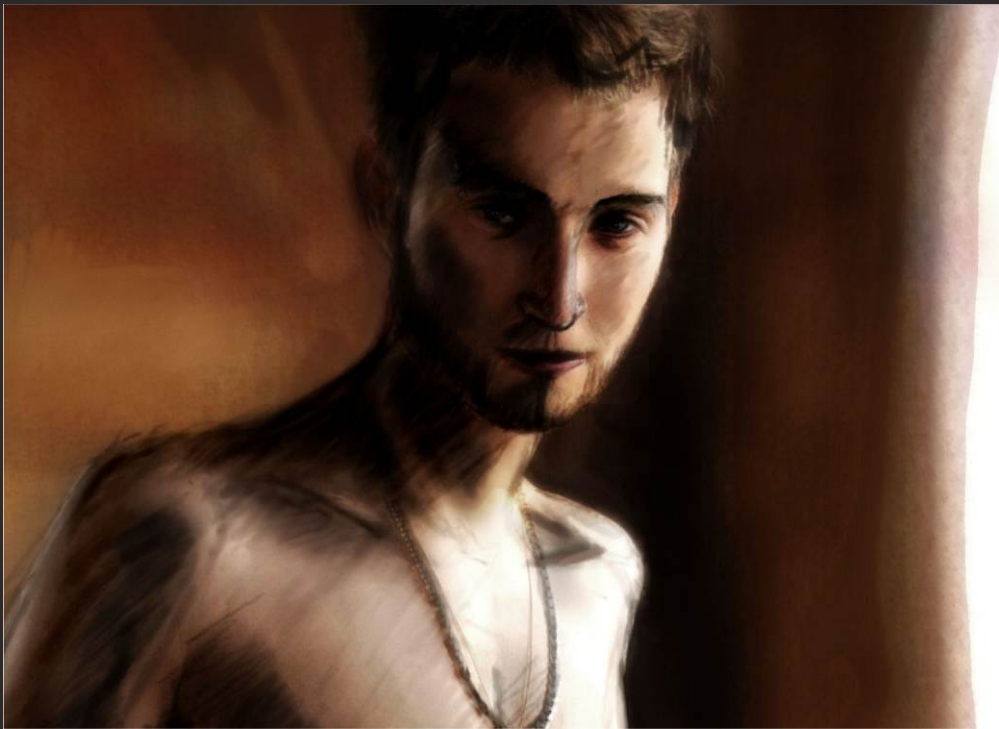




The painting features in PD Pro 5 are a pleasure to use. I have never been a 'great' painter, and I've let myself get a bit rusty, but PD Pro simply drove me to paint. The medium loaded oil brush is one of my favorites. I also like the water color brushes. Not only does PD Pro have a large selection of brushes for you to create with, but it also has several different color selecting modes including the ability to generate a color palette from an imported image. Another thing I really like about the new PD Pro 5 is its redesigned media browser. This new browser makes searching for the right

brush a lot easier. PD Pro has also added a variety of new brushes to its arsenal. PD Pro brushes offer more than just your standard brush styles. PD Pro's particle brushes are outstanding and very addictive. While particle brushes are not new to version 5, they are still unique and offer endless possibilities. The particle brush palette comes with 20 different options to choose from. Painting with particles is an organic experience. It actually looks like things are growing on your computer screen. This is a very interesting experience and can provide inspiration for unique art projects.





PD Pro 5 is not only a powerful digital painting tool, it is also an animation tool. The animations features of PD Pro takes old style 2D animation and brings it into the 21st century. I really like being able to create animations the old fashioned way by using the papers and desk lamp features of PD Pro. Not only can you animate frame by frame in PD Pro, you can also paint with animatable brushes! This is where PD Pro's particle brushes really shine. Animated particle brushes can create fields of grass waving in the breeze or clouds rolling across the sky as well as other amazing effects. You can also load videos into PD Pro and add these animated particle effects to your movie.

Being able to add effects in post is what really pulled me into PD Pro 5. I am a multimedia artist with a focus on 3D graphics and film making. PD Pro 5 gives me a very good and attractive tool set for sketching, storyboarding and blocking, providing a perfect fusion of classic and modern animation. PD Pro 5 can even paint video on video. Of course, you have to be careful here and not load too heavy files. It can even do some motion tracking tasks such as attaching sparklers or other effects to a desired element in your video. If you don't have a video post production suite, try PD Pro 5. It can dramatically enhance your videos. The developers website, [www.thebest3D.com](http://www.thebest3D.com), can show you many examples of just how versatile PD Pro 5 can be.

If I could wish for anything for this program it would be added support for other operating systems such as Mac or Linux, but that's a small thing compared to the outstanding features of PD Pro 5. With all the brushes, effects, dynamic particles and animation features, working in PD Pro is only a pleasure. Project Dogwaffle Pro 5 is a must try tool for your digital art and animation tool chest.



D.B.  
Danas Anis  
Bartkevičius  
Productions



**Turbo boost by Fenric:****ERC**

657263da

**There's a new star in the world of Carrara, and his name is Fenric. Fenric has listened to us, the Carrara users, and created a magnificent new plug-in which dramatically enhances animation in Carrara called ERC. ERC or Enhanced Remote Control is the newest addition to Carrara's toolbox.**

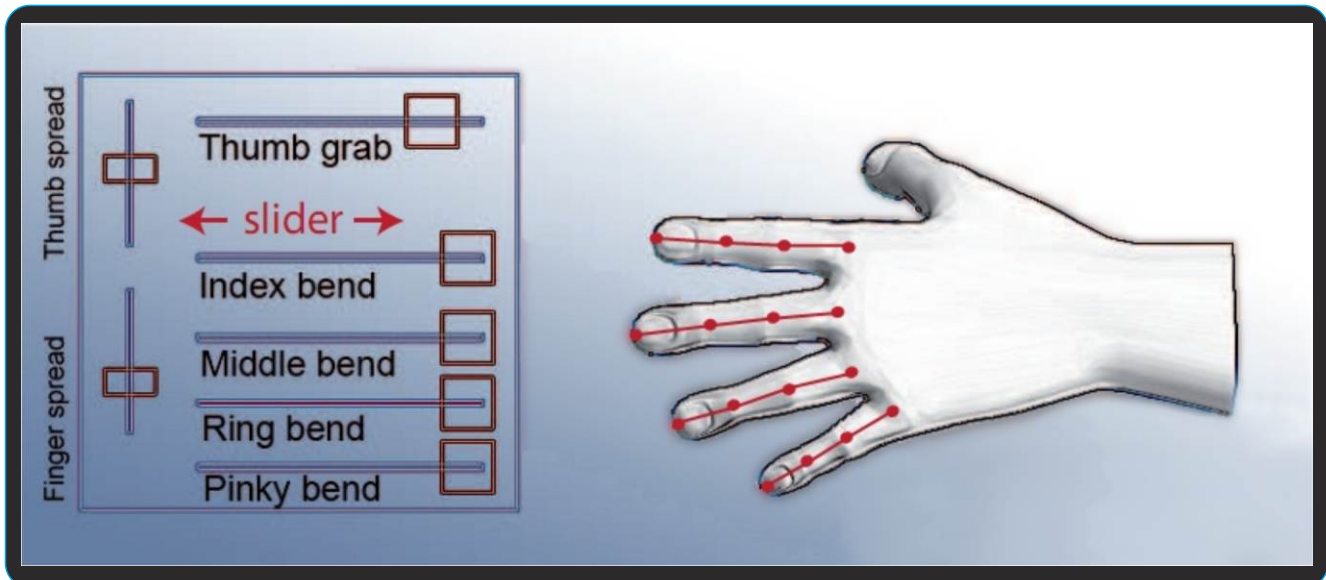


Image by Faba

ERC (Enhanced Remote Control) is a method of linking the parameter of an object to itself or another object. Imagine you have a character whose biceps need to flex when his arm bends. Completing this task can be time consuming while animating. You have to stop and adjust the morphs by hand each time the desired action occurs in your animation. With ERC, you can create a system which automates this process, allowing you to link the action of bending the arm to the flexing muscle morph. Every time

the arm bends the muscle bulges. You only need to set it up once and ERC does the rest. Or maybe you have a character with more than a hundred morphs. Going through that list to make adjustments can be a real pain. ERC allows you to create visual handles anywhere in your scene to control any supported values. That means you can set up visual controls to modify morph targets directly on the character. This can be a real time saver if your animation calls for repeated adjustment of a long list of morphs.

Fenric's ERC plug-in is not your standard ERC modifier. It can do everything Poser's native ERC solution can do and more. Fenric's ERC supports time based operations. This brings a whole new dimension to the ERC experience. Fenric also created a property explorer which is handy when checking what values are available to be modified. You can also change the values directly in the properties explorer.

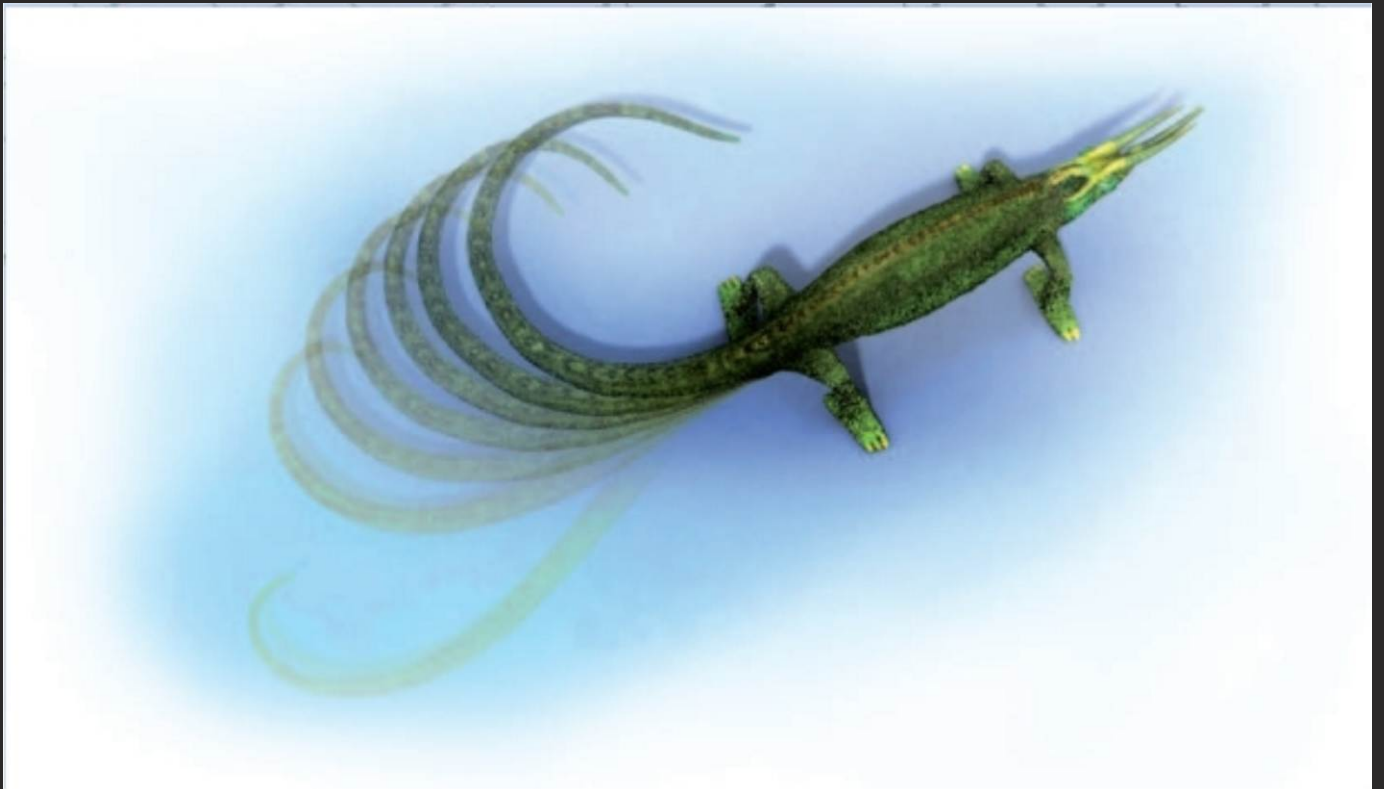
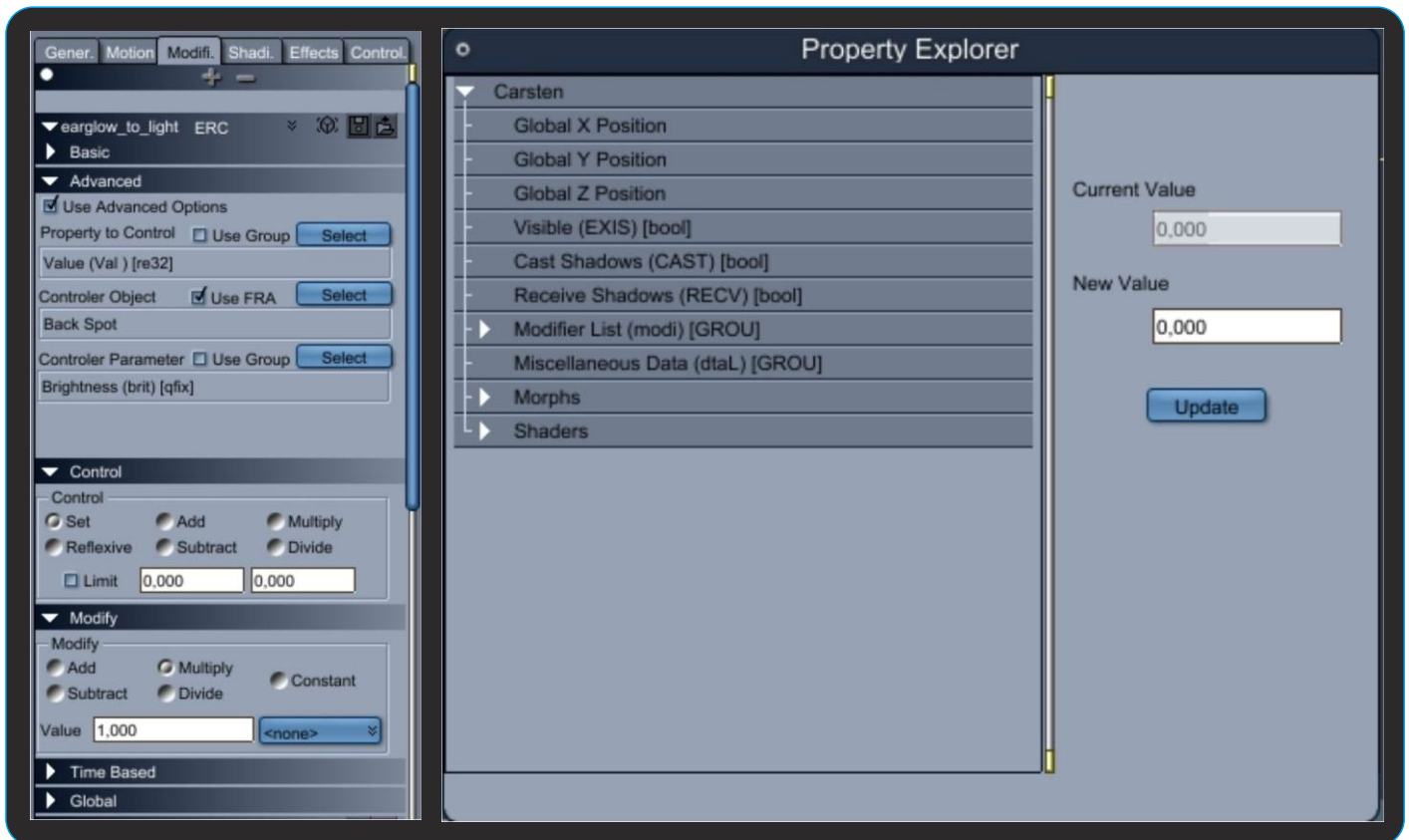


Image by Faba

Once you purchase Fenric's ERC modifier, you get a set of tools that are an animator's dream come true. The package includes commands such as Add ERC Modifier, Create ERC Chain, Add Pin Modifier, Delete Key Frames, Remove Duplicate Key Frames, Jitter Key Frames, Change Morph Limits, Properties Explorer, Modifier like Pin and ERC. I will confess that once I saw ERC's settings panel, I got a bit nervous. There are just so many options! But the old saying, 'You can't judge a book by its cover', was never more true than with Fenric's ERC. The ERC is designed with the user in mind. You can be up and running in no time with just a basic knowledge of Carrara, an understanding of rigging and a read through ERC's documentation.

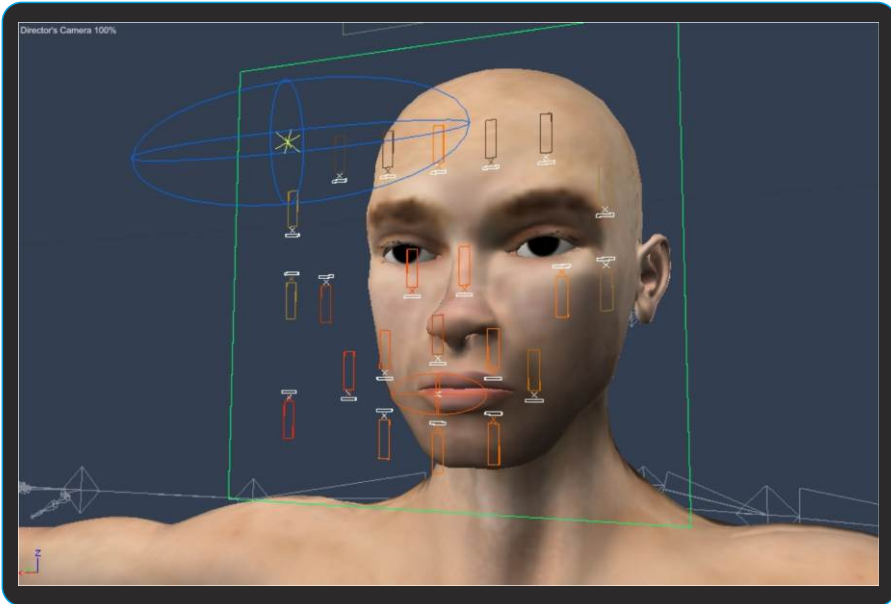


The ERC plug-in comes with a well made manual. The manual describes each feature and limitation of the ERC plug-in, so reading the manual is a must. Not only does Fenric's ERC come with great documentation, there are also several very good tutorials available by ERC beta tester, Faba. Faba has made a very big contribution to this plug-in. Her outstanding tutorials help the user visualize what's involved with using the ERC plug-in. Faba's tutorials really showcase what's possible with ERC.

Once you begin to create rigs using ERC, its complicated look turns into a well designed interface. It is a well balanced tool. All you have to do is select an object you want ERC to control, apply an ERC modifier, pick controllers, select what and how it controls the object. That's it! Keep in mind that for ERC to work correctly, your figure needs to be rigged correctly. If your controllers and figures are not rigged correctly, you may end up with some very interesting, unintended results.

Fenric has made a lot of Carrara animators very happy with his new ERC plug-in. ERC has added long missing and much needed features to Carrara that most modern 3D packages already have. It is a major improvement to any Carrara artist's work flow. If you still have doubts, think of it this way: Which would you rather do, build an automated ERC setup once and enjoy automated modifications to your object or edit each change by hand each time you change something in your project? It's not a hard choice. Fenric's ERC plug-in is for me.





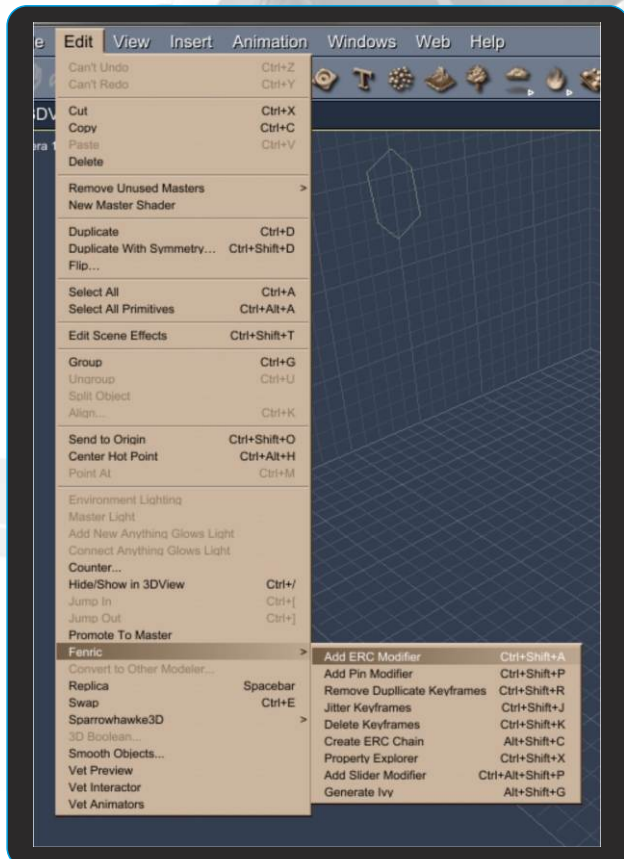
Facial controls rig by Faba to modify the facial morph targets directly on a character.

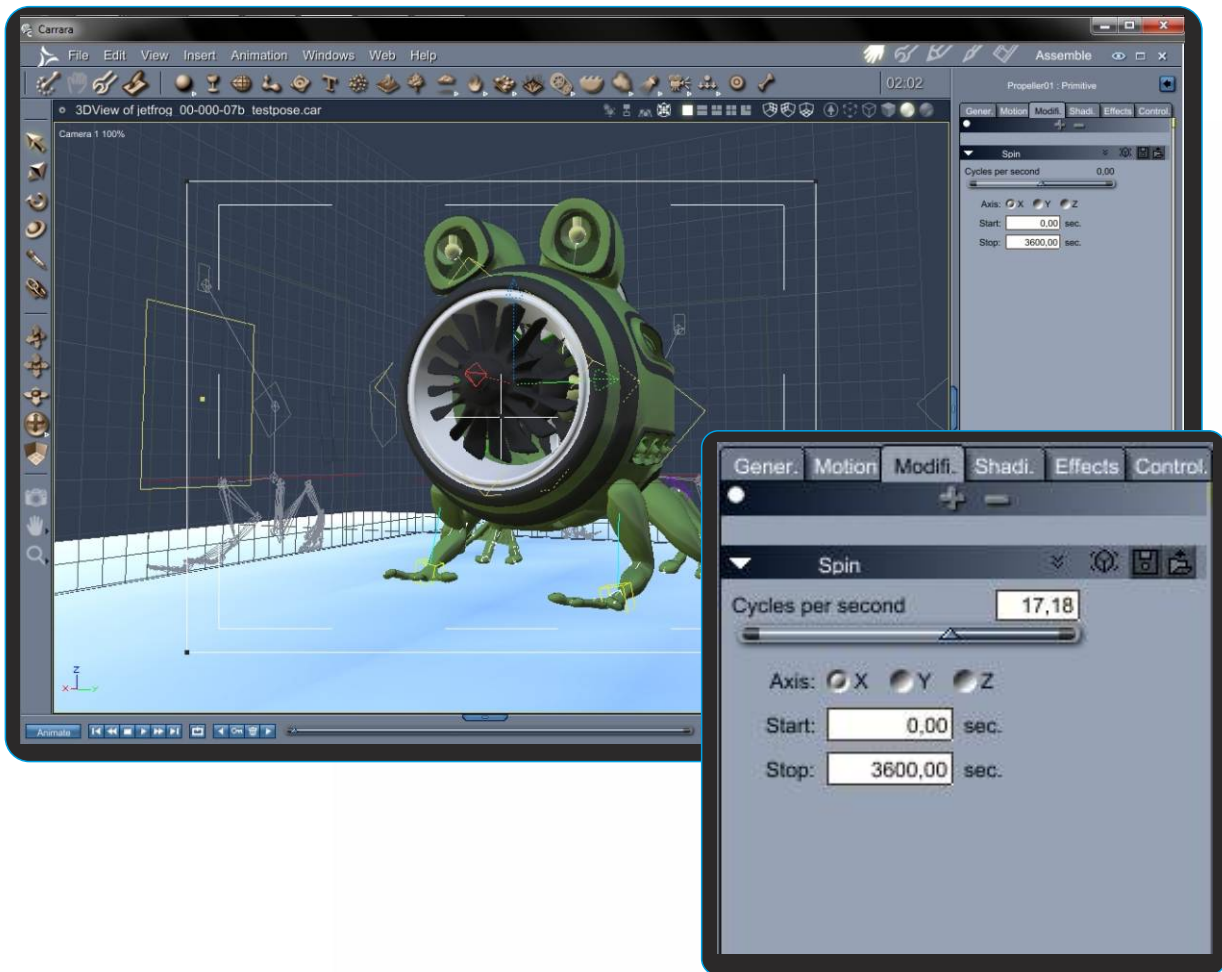
Image by Faba

Facial controls rig by Faba to modify the facial morph targets directly on a character.



Image by Faba





ERC modifier applied to the light bulb inside the engine of the Jetfrog and the brightness of the light bulb is controlled by the cycles per second parameter of the Spin modifier applied to the turbine of the engine.





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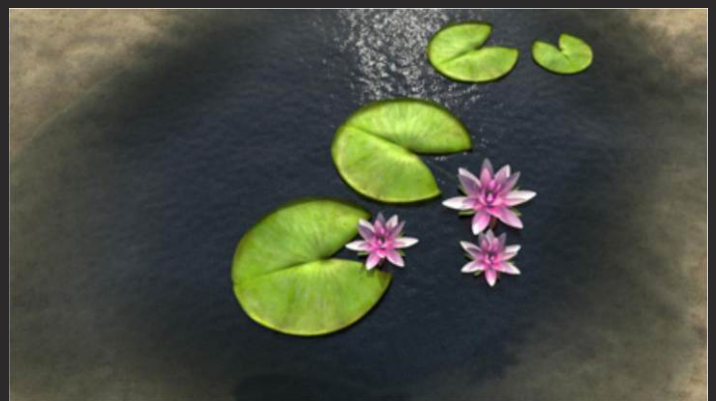
# The Frog Prince

by **Eva Vomhoff**  
A.K.A. Faba



In old times when wishing still helped one, there lived a king whose daughters were all beautiful, but the youngest was so beautiful that the sun itself, which has seen so much, was astonished whenever it shone in her face. Close by the King's castle lay a great dark forest, and under an old lime-tree in the forest was a well...

Did it really happen that way? Did they really live happily until their deaths?  
I will tell you the real story of the frogprince...







The winner of Carrara 3D Expo's "Tell a Story" animation contest was the very talented Eva Vomhoff, also known as Faba. In a short three months, Faba crafted a beautiful story illustrating the struggles of one determined frog in his pursuit of a beautiful princess. This story of love and perseverance is deftly crafted with humor with a nice twist for an ending.

**C3DE | Faba, how did you decide on the style and genre of your animation?**

**Faba |** I do like fairytales. Generally, they show a simple problem which can be solved with just acting morally, but that's not how the real world works.

I picked a semi toon style because I didn't want to be caught in the uncanny valley. It's much easier to create and to animate characters which are not pretending to be realistic. Non realistic characters allow you more freedom for exaggerated motion and expression.

The characters for The Frog Prince were modeled in Hexagon, textured in 3D Coat and rigged in DAZ Studio.

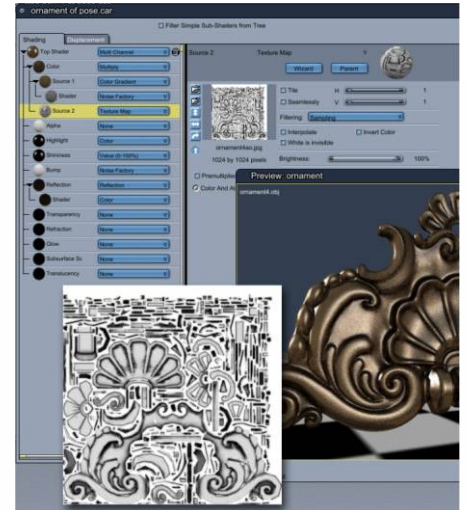
**C3DE | Your textures are outstanding. Could you tell us what process you went through to create them?**

**Faba |** Some of the textures are procedural shaders and some are hand painted textures created with 3D Coat. Though procedural shaders take a bit longer to render they have the benefit of looking detailed even in a close up without the need to create a huge texture map.

So, I used procedurals for parts of the landscape and the castle (mud, sand, water, grass, metal, curtains) while the castle walls and the characters are hand painted with a texture map, a normal map and a highlight map.

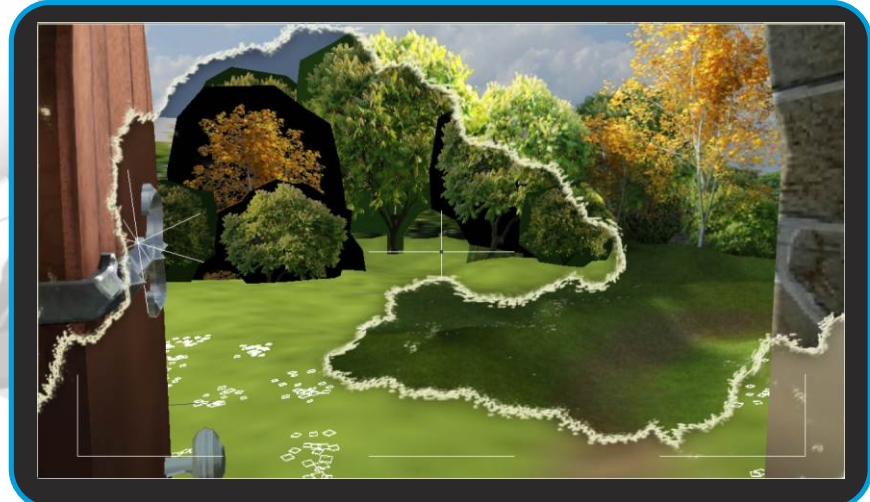
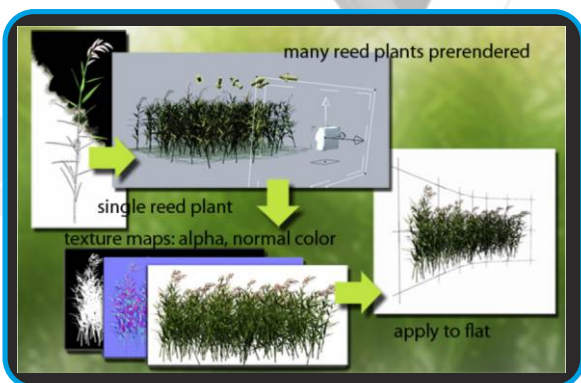
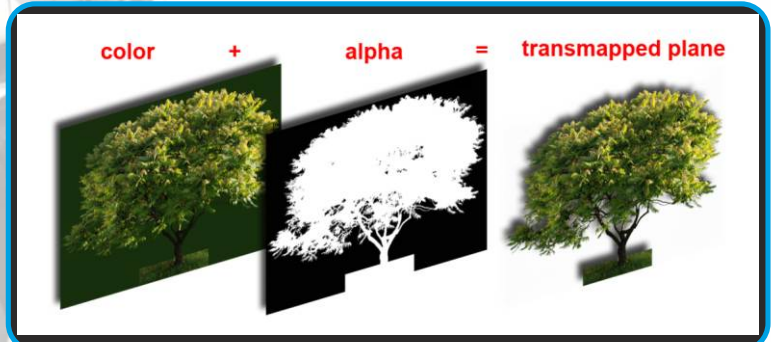
The mirror frame uses both methods. I used a procedural gold shader combined with a prerendered AO map multiplied.

In general, the shaders are kept very simple, without subsurface scattering or other render expensive features. Using complex shaders would have blown up the render times too much.



**C3DE** | I have to mention your scenery. It gives the appearance of being a detailed, modeled scene, but it's not. Tell us how you created your sky and forest.

**Faba** | I did some experiments with the realistic sky editor but didn't get the results I wanted. Finally, I used a panorama sky photo as a background. The whole scene is surrounded by a 'fence' with tree images on it. This helped to keep the scene size low and therefore reduced render times. To avoid giving the impression of being surrounded by a wall of trees, I added some billboards with images of trees and a corresponding alpha channel. A subtle depth of field was added in post.





**C3DE | Did you use the same technique to create the princess's room or is the room a real 3D model?**

**Faba |** The room is a 'real' 3D model. Actually, the render time inside the room was pretty fast, because I could remove all the outside objects from the scene.



**C3DE | What about the armchair? I know it's just a background element, but it looks so good. Was it modeled in 3D?**

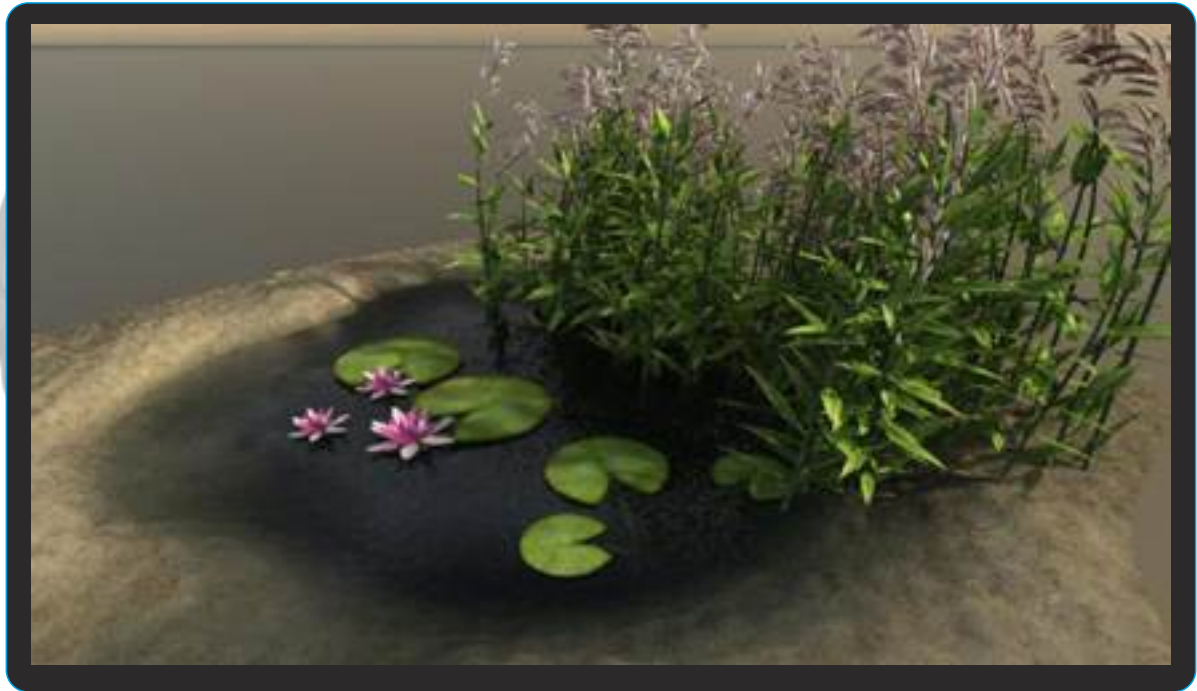
**Faba |** I have to admit that I modeled this object in the past and just reused it for The Frog Prince to bring more detail into the background of the scene.

It can be very helpful to build a library of models which can be reused in other projects. This saves time for other tasks.

**C3DE | You must tell us how you crafted the water for your animation. What are your secrets?**

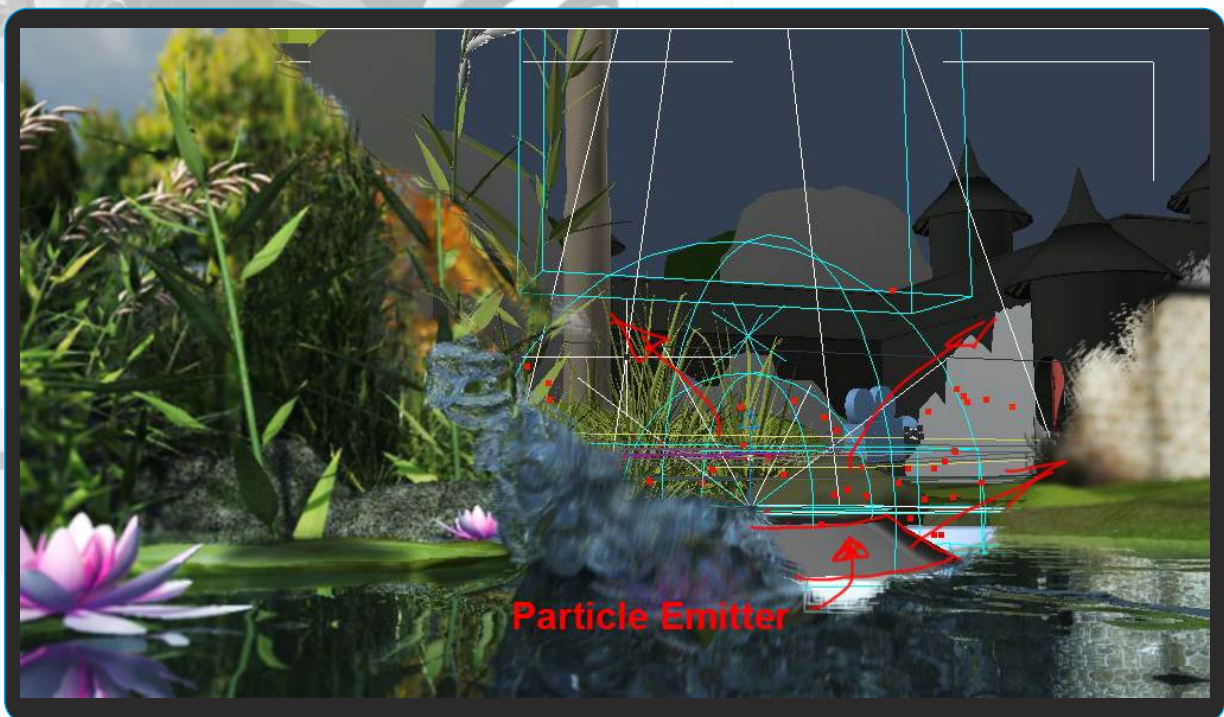
**Faba |** The water surface has absorption added to simulate the effect of light being absorbed by deep water. In shallow water the ground is visible, while in deep water it looks almost black. In simulating the water's movement, I combined several effects: fractal noise for the regular movement, big ripples with displacement for the impact wave and small ripples for the droplets that fall back into the water.





The splash is a meta particle emitter and was the most time consuming render effect I had.

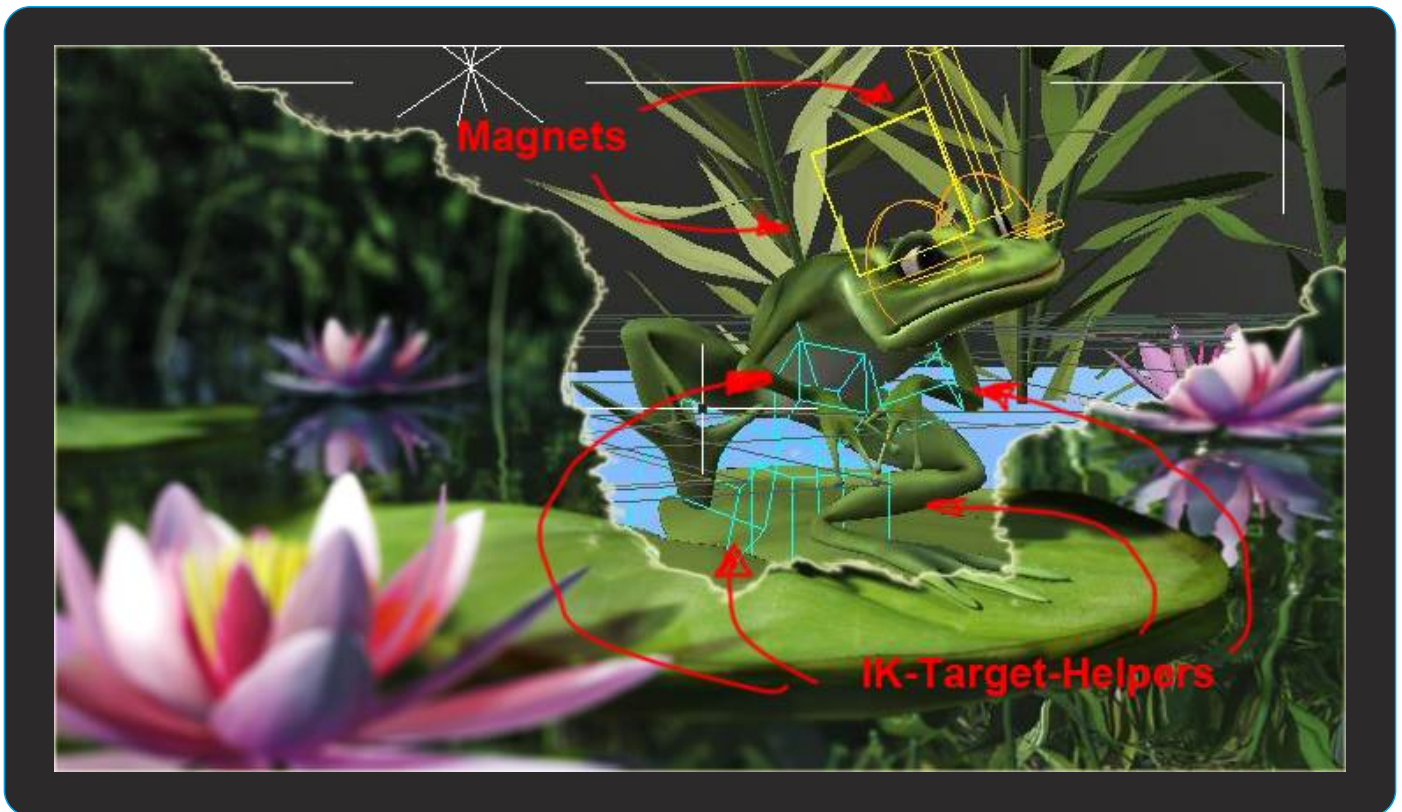
There was some depth of field and motion blur added in post. The next time I have such a tight deadline I won't use such an effect. Instead, I'll focus more on the character animation.



## C3DE | What problems did you face in the creation of your animation and how did you solve them?

**Faba |** Animation timing! I don't have much experience in character animation yet, so animation timing was very difficult for me. How long does the princess look in the mirror? How many frames does it take to turn around? How many frames does it take to change the facial expression? It was a lot of trial and error to get an acceptable result.

**Secondary motion!** I found out that secondary motion is very important. It's not that you actually see it, but your brain recognizes the absence of it. Without secondary motion your animation looks stiff.



At first, I tried to find a way to get automatic secondary motion, for example on the princess's pigtails and her skirt, so I wouldn't have to key everything by hand. I tried jiggle and cloth plug-ins and also Carrara's softbody physics. The results were nice in some situations but not really what I wanted in other situations. To avoid losing control, I added bones to the skirt and the pigtails and animated them by hand. I also added some secondary motion to the eyes of the frog by adding magnets to make his eyes wobble when he moves.

**Fluid motion!** Sometimes a sequence just isn't quite right. You've watched the animation for hours trying to find out what's wrong, but you just can't say what it is. That's when it's time for a break. :)

The Frog pronce blog: <http://www.evajoe.homepage.t-online.de/index.html>





Even if it was a lot of work for 3 months, I enjoyed the chance given to me by the “Tell a Story” competition. I guess without the pressure I would never have finished an animation of that length in so short of a time.

... and they all  
lived happily  
ever after...





# Primivol

## Create the Rockets scene

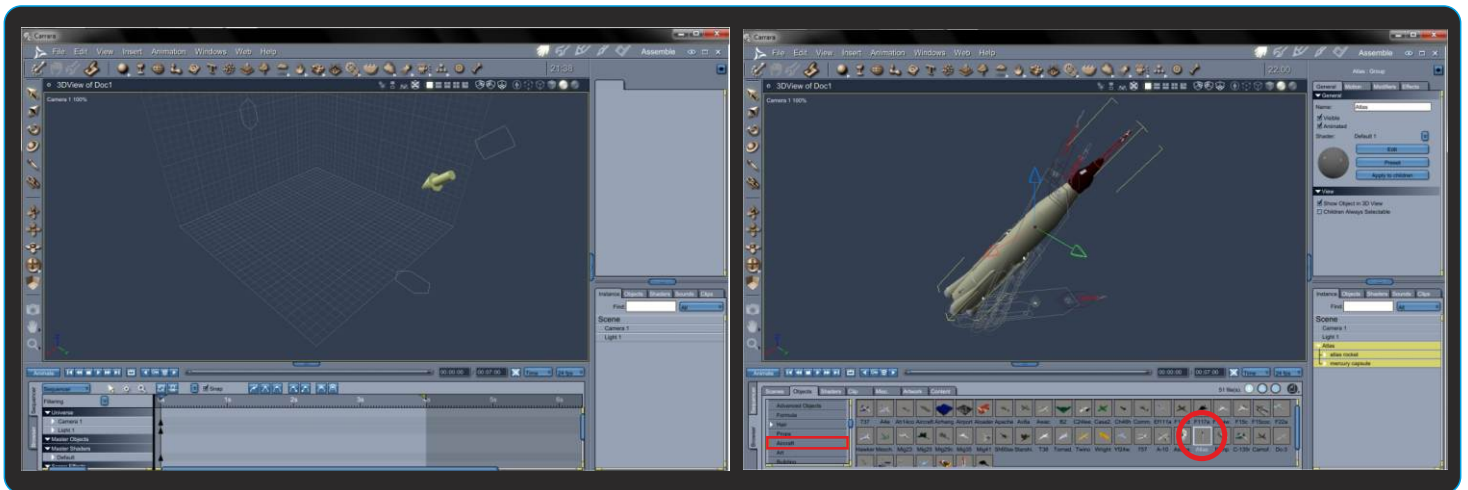
6372656174652074686520726f636b657473207363656e65



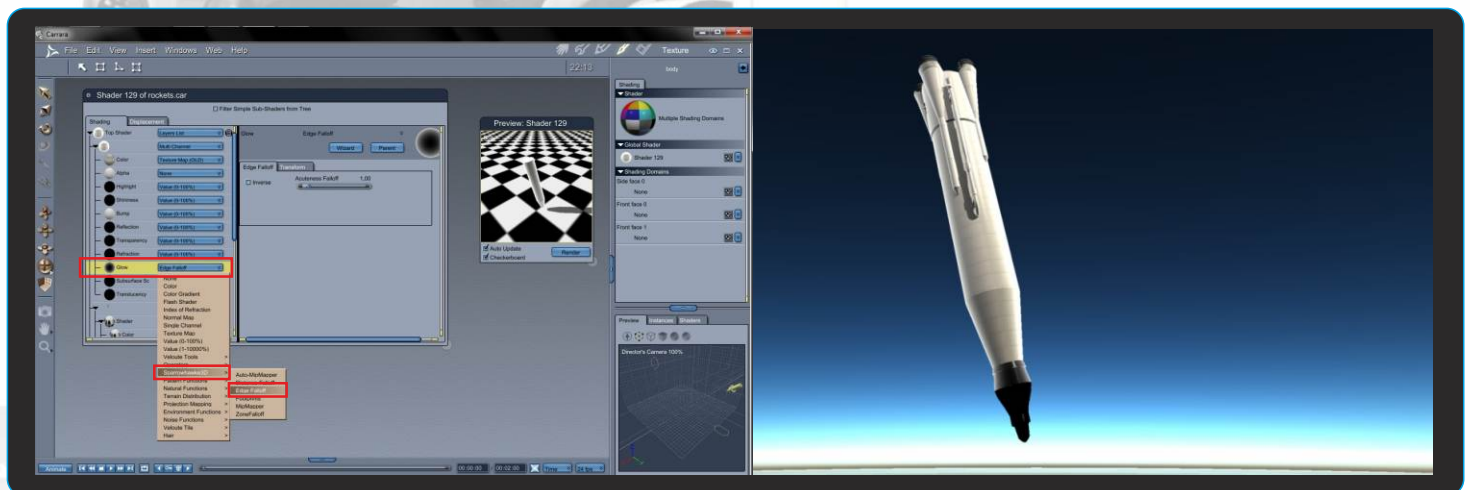
In issue 05 of C3DE, we included a review of the Primivol plug-in by Inagoni. The review included the image "Rockets" by Danas\_Anis. In this tutorial, Danas\_Anis shows us how he created that image using Primivol.

First of all, you need to have the Primivol plug-in reviewed in issue 05 of C3DE. I also recommend you download and install Sparrowhawke's plug-ins pack if you don't already have it. You will need the Edge Fall Off plug-in. If you have the Shader Ops plug-in by Digital Carvers Guild you can use that instead.

To begin, you need to launch Carrara and create a new scene. A medium scene will work best for what we are going to do. In the image "Rockets", I modeled the rockets myself, but since this tutorial is not about modeling, we will use some of Carrara's own native content to create our image. Just navigate to Objects in the Carrara browser, go to Aircraft, choose the Atlas object and drag it to the instances panel. The object will be huge and out of camera view. Click 0 (zero) on your keyboard to show the selected object in your camera view. For a better workflow, you may want to switch to the directors camera for the remainder of this tutorial.



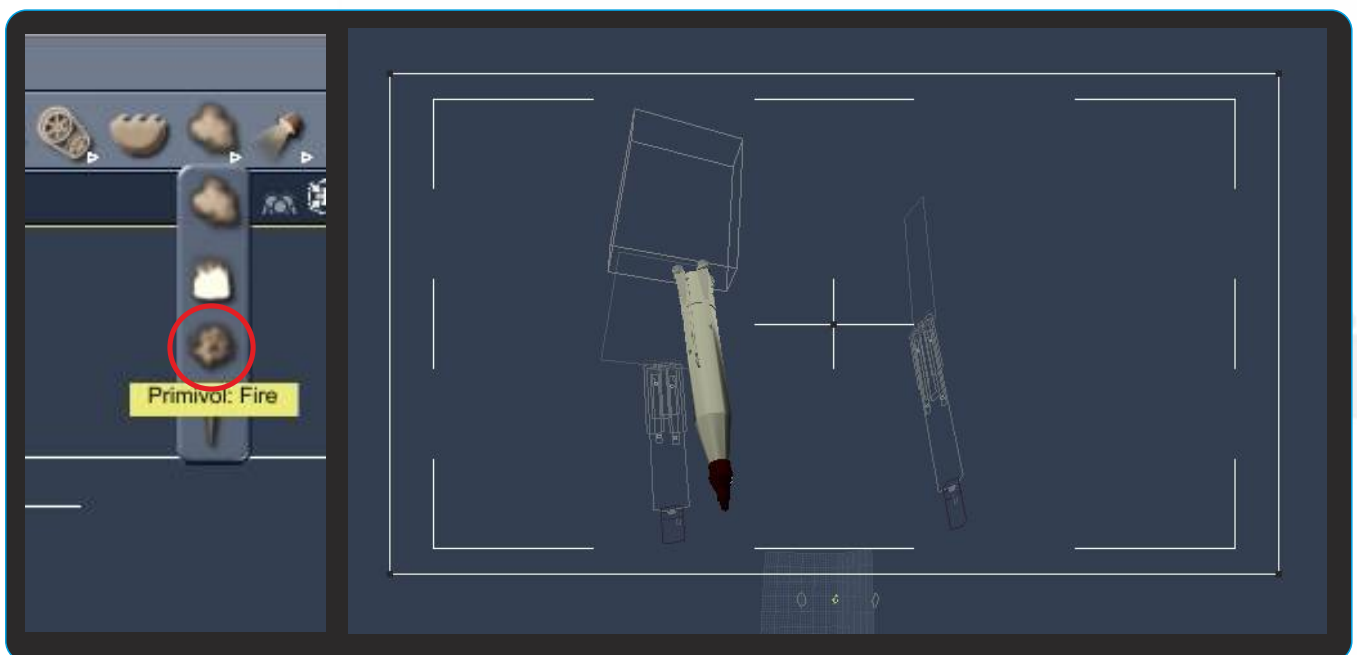
Since you no longer need the browser or extended timeline, you can hide them and give yourself more room to work. Now that we have a clean workspace, let's clean up our rocket. The Atlas object has some parts we will not need for our project. Expand the Atlas Rocket group, then expand the Mercury Capsule group and delete the Tower and Emergency Rocket objects. That's it. Now, we can work on the shaders. Just select any part of the rocket body and go to the Shader room. If Carrara prompts whether to edit the master shader or create a new master, select edit the master. In the Shader room, we navigate to the Glow channel and apply the Edge Fall Off or Shader Ops mixer. I am using Edge Fall Off for this tutorial. Set the acuteness to 1.00. Do this for all the shaders of the object that are not changed. If Carrara prompts whether to edit the master or create new master, select edit the master. Once you are finished, what you have is a rocket that looks like it's lit by global illumination.



Now that we have the rocket set up, we can set up the sky. We need to do the sky now because the scene colors make a difference in setting up Primivox. For this scene, Realistic Sky presets such as Blue Sky or Dawn will do.



Once the sky is set up, you can insert the Primivol Fire primitive. After you've added the Fire primitive to the scene, you will be presented with the Primivol Edit room. I recommend you locate the primitive at the rocket's engine and scale it using the Z and Y axis. This will make it much easier to edit the Primivol Fire primitive within your image. The preview window shows you how the final render of the Fire primitive will look. Now, you can begin to edit the Fire primitive to make it more realistic and appealing. I usually use the hit or miss method when editing in Primivol. This is part of the fun of Primivol. The hit or miss method allows you to get a better feel for the plugin and its abilities.





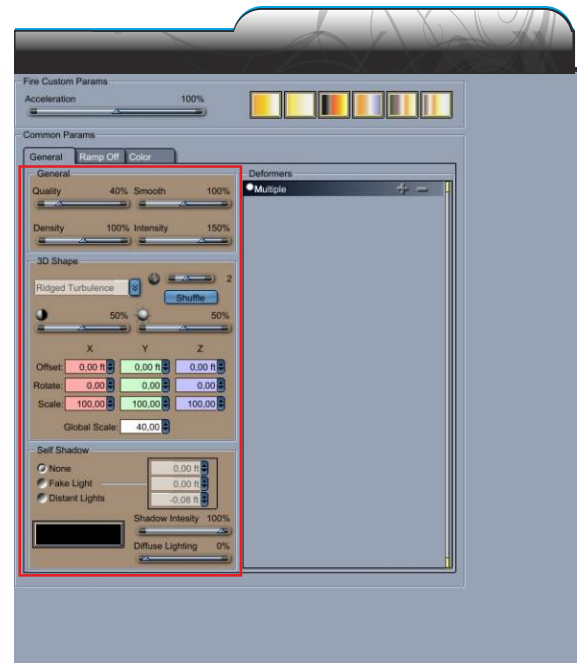
For those of you who require a bit more guidance the following settings should work very well:  
Acceleration is set to 100%

In the General tab:

Quality - 40%  
Smooth - 100%  
Density - 100%  
Intensity - 150%

3D Shape:

Built-in noise - ridged turbulence  
Fractal Depth for the built-in noise - 2  
Contrast and Brightness of the 3D shape are set to 50%  
Offset: x=0, y=0, z=0.12 ft.  
Rotation: x=0, y=0, z=0  
Scale: x=100, y=100, z=100  
Global Scale: 40  
Self Shadows are set to none



The Primivol Fire we are making includes two deformers in the deformers panel. The first deformer is Noise. Adding a deformer in Primivol works the same way as adding a simple modifier to an object. In the row named Multiple you just need to click on the + icon and pick the deformer from the list. Once you have your deformer, the settings for the Primivol noise for this scene are:

XYZ values set to 100%

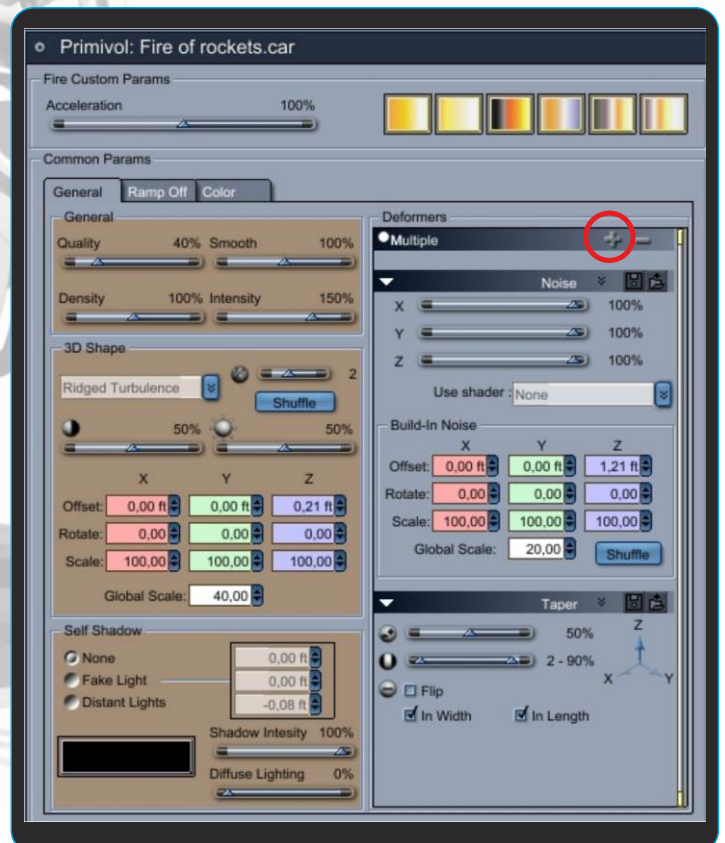
We do not use a shader, so it is set to none.

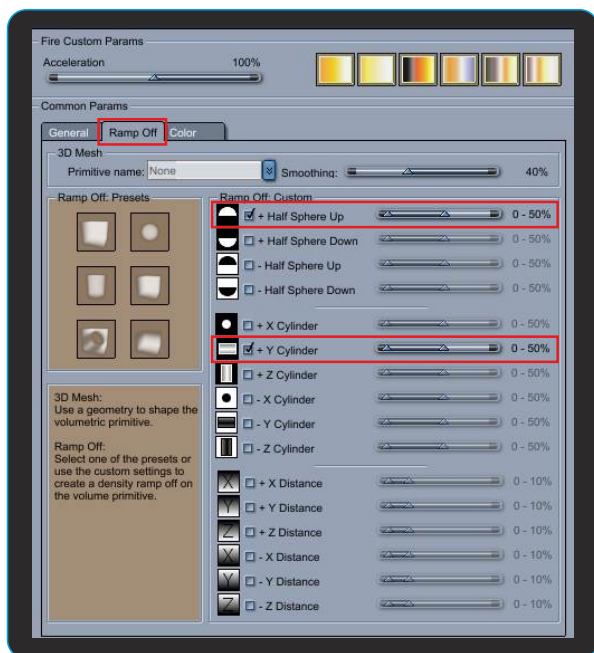
Built-in Noise parameters:

Offset: x=0, y=0, z=1.2 ft.  
Rotate: x=0, y=0, z=0  
Scale: x=100, y=100, z=100  
Global Scale: 20

The second deformer for our Primivol Fire is the Taper modifier.

The axis for the Taper modifier is set to z.  
Strength: 50%  
Limit: 2-90%



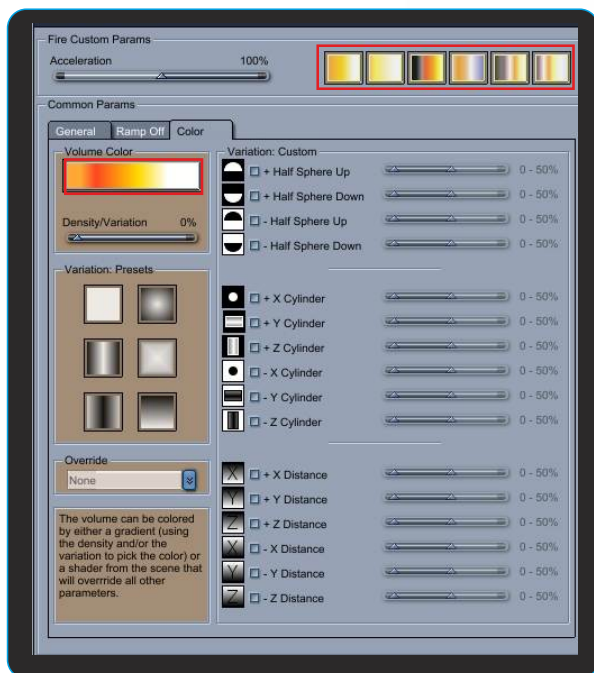


Finally, we can move on to the Ramp Off panel. Here we will focus only on a few settings.

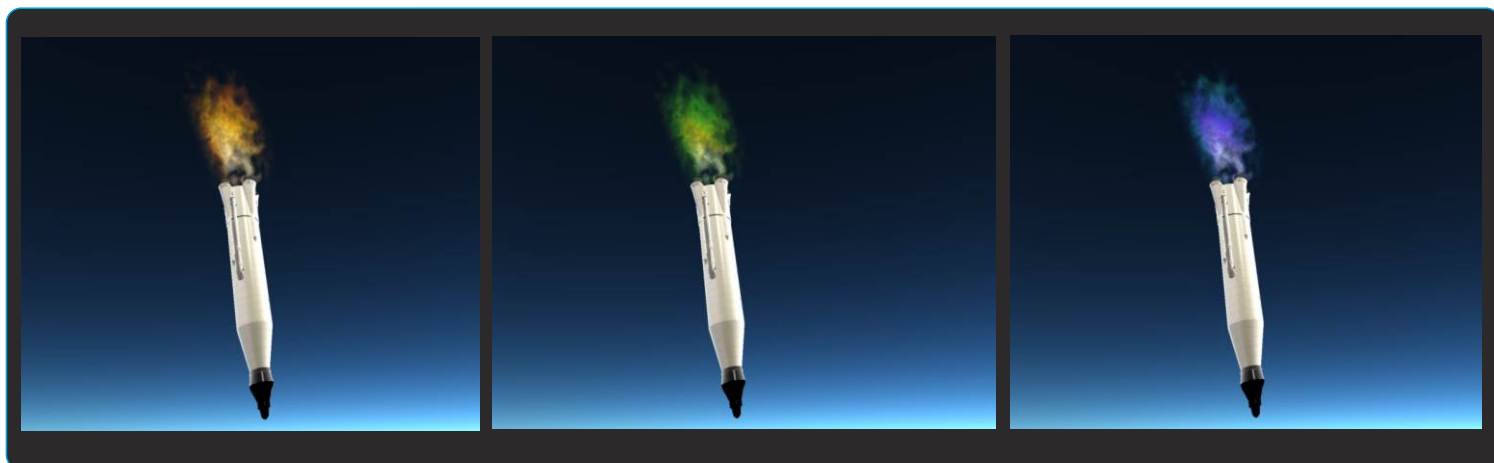
3D Mesh Smoothing is set to 40%

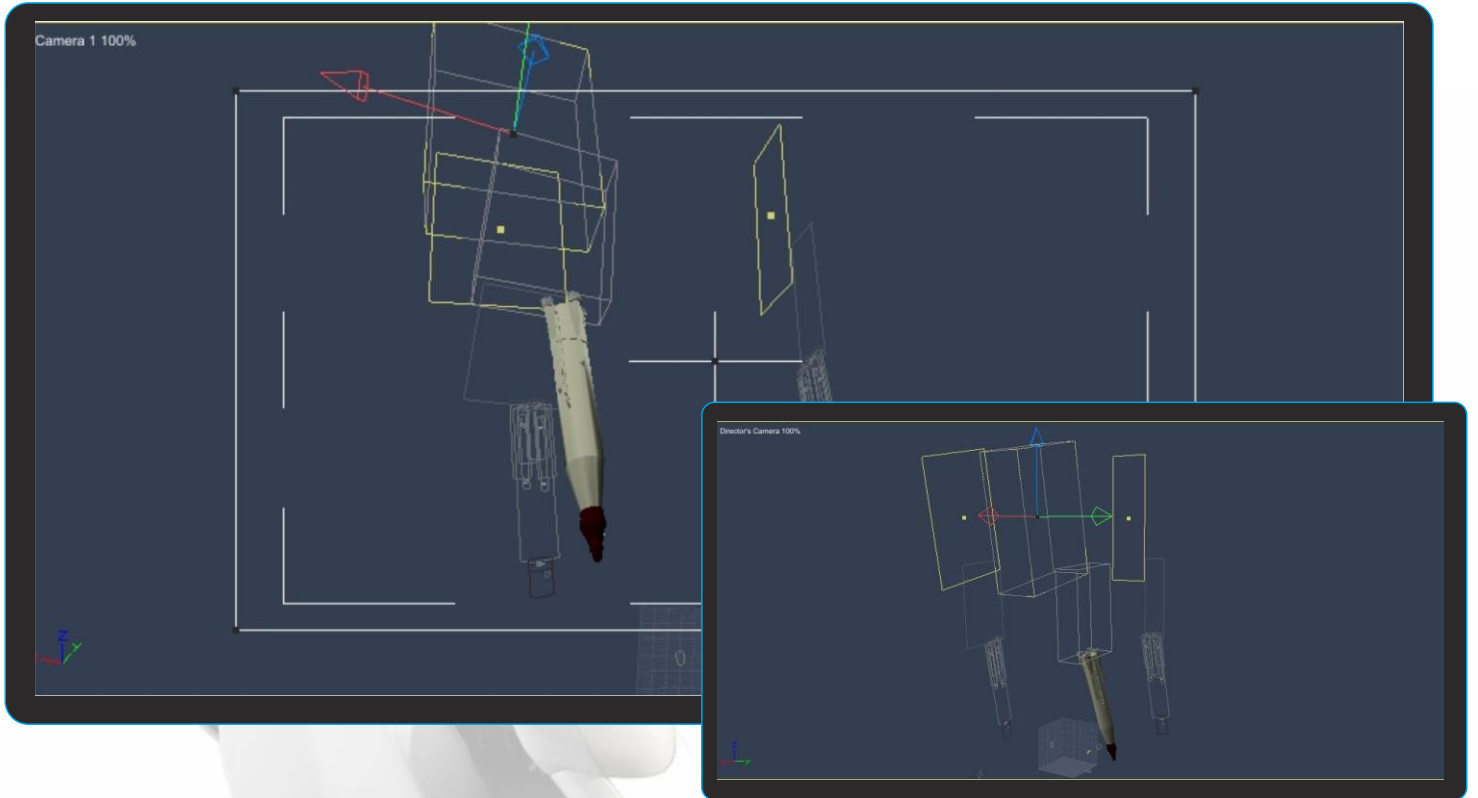
In the Ramp Off/Custom section place a tick on "+ Half Sphere Up" with limits set to 0-50%

Also place a tick on "+ Y Cylinder" with limits set to 0-50%

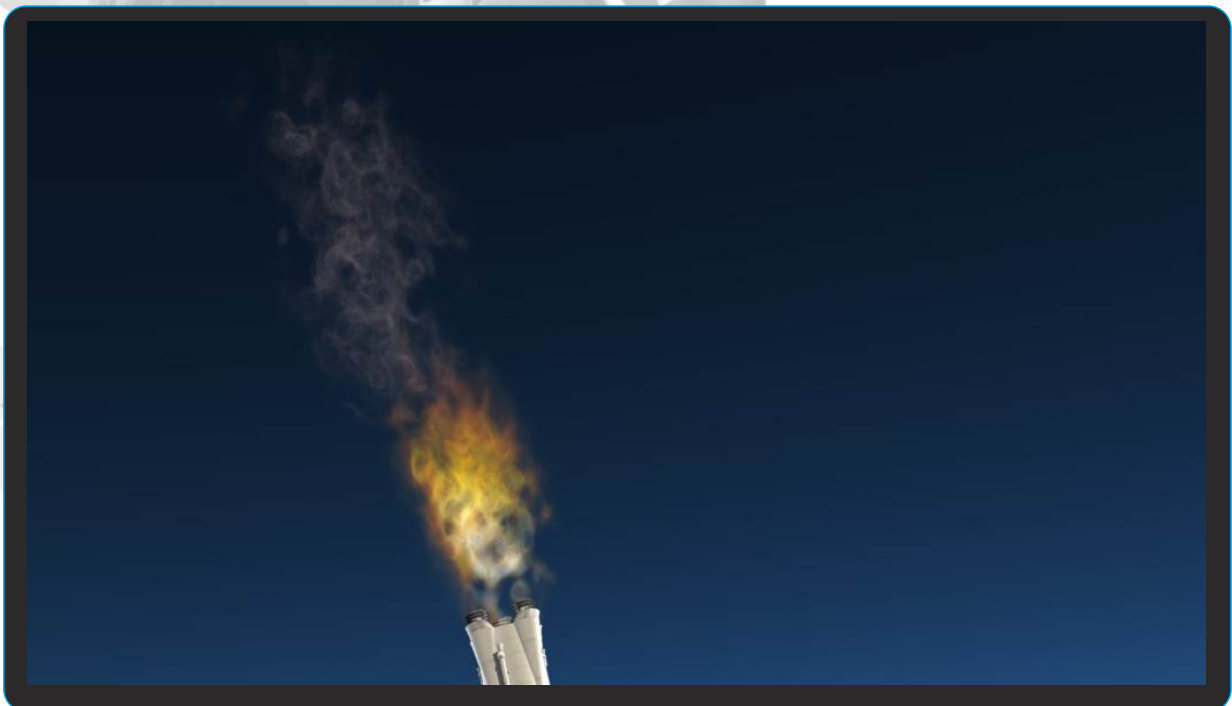


The last of the settings we will need to modify is Color. I am using my own custom made gradient, but you will find the gradient presets in Primivol work quite well. Orange, pale yellow, red, yellow and white colors do the job very well, but don't feel obligated to use these colors. If you decide to place your rocket on an alien planet where the inhabitants use different chemicals for their rocket fuel, you might use purples, browns, greens and pinks to create your rocket flame. Experiment and have fun!

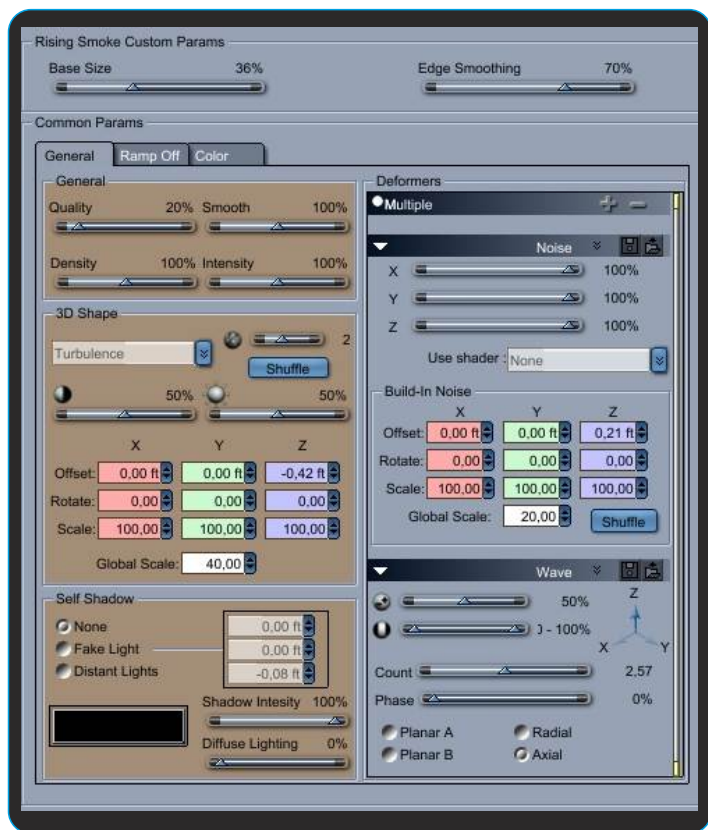




Before we continue, we need to decide on a camera angle for our image. It's important that we do this now because in creating this effect we also have to create a deception. One disadvantage of Primivol is that it can't intersect with other Primivol objects. This limitation means we must think in layers when we place the Primivol primitives. We'll be using the Primivol Smoke primitive next and since Primivol primitives can't intersect we must be creative in our placement of the object. Once we know the exact camera angle we can go back to the Assemble room and position our Smoke primitive behind and above the Primivol Fire primitive and rescale it.







Now we can return to the edit mode of the Smoke primitive. Here we have almost the same space as with the Fire primitive except for a couple of new settings. Here are the settings that worked for me:  
**Rising Smoke Custom parameter:**  
 Daze size: 36%  
 Edge Smoothing: 70%

**Common parameters:**

**General:**

**Quality:** 20%

**Smooth:** 100%

**Density:** 100%

**Intensity:** 100%

**3D Shape:**

**Built-in noise:** Turbulence

**Fractal depth of built-in noise:** 2

**Contrast and Brightness of the 3D shape** are set to 50%

**Offset:** x=0, y=0, z=0.42 ft.

**Rotate:** x=0, y=0, z=0

**Scale:** x=100, y=100, z=100

**Global Scale:** 40

**Self Shadows** are set to none.

In the deformers section, I have used the following Noise and Wave modifier settings:

**Noise Modifier settings:**

x=100%, y=100%, z=100%

Use Shader: none

**Built-in noise:**

**Offset:** x=0, y=0, z=0.21 ft.

**Rotate:** x=0, y=0, z=0

**Scale:** x=100, y=100, z=100

**Global Scale:** 20

**Wave Modifier settings:**

The z axis is used.

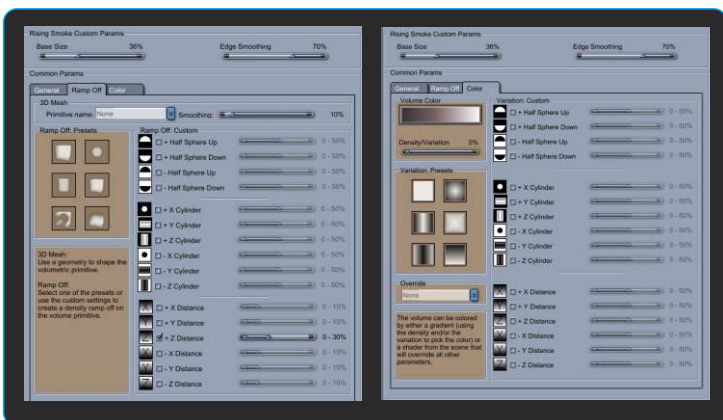
**Strength:** 50%

**Limits:** 0-100%

**Count:** 2.57

**Phase:** 0%

**Axial**



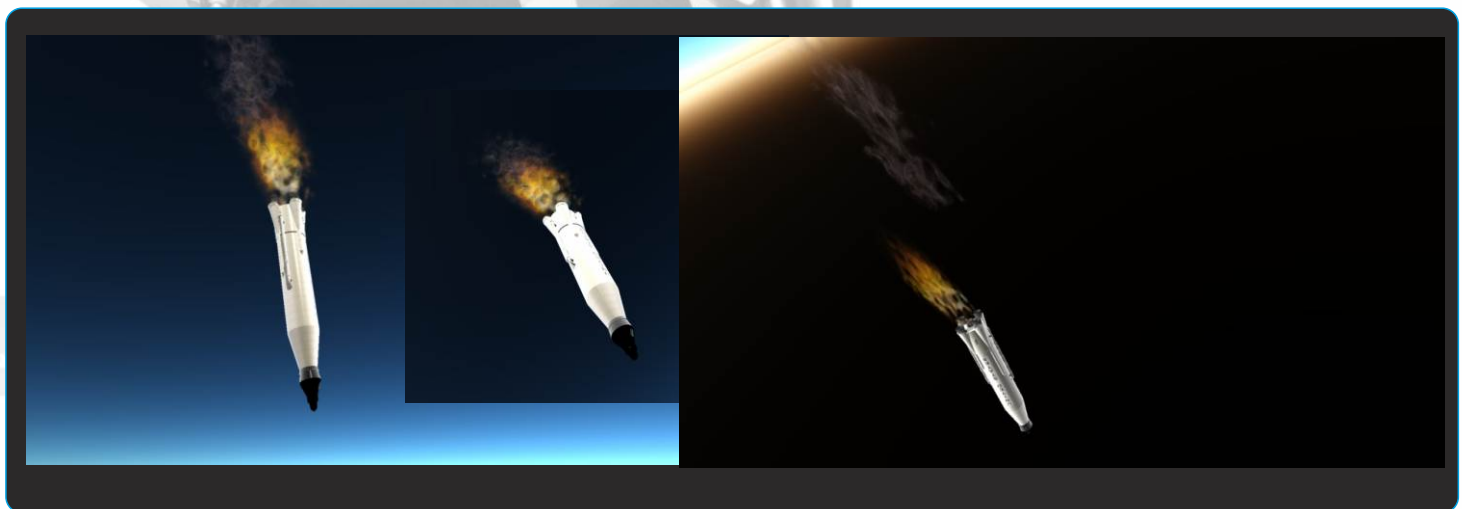
The Ramp Off panel has +z distance marker with 0-30% limits. I have set the colors to the following color gradient:  
 Brown, pale reddish brown and white.

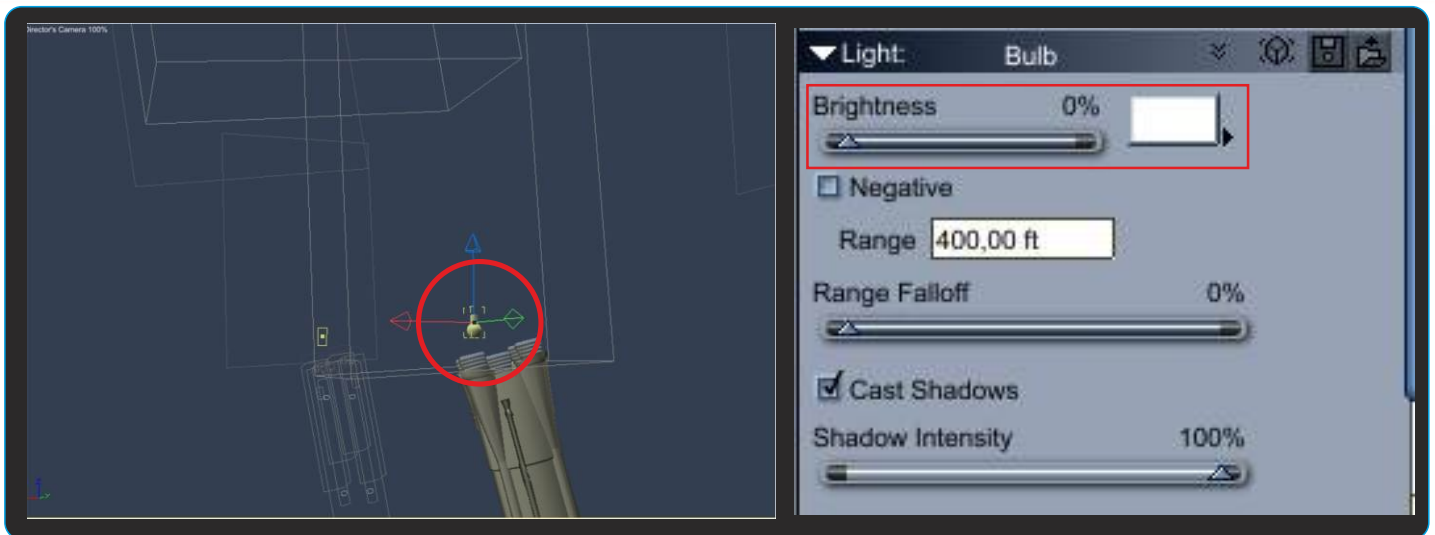
No other options are changed.



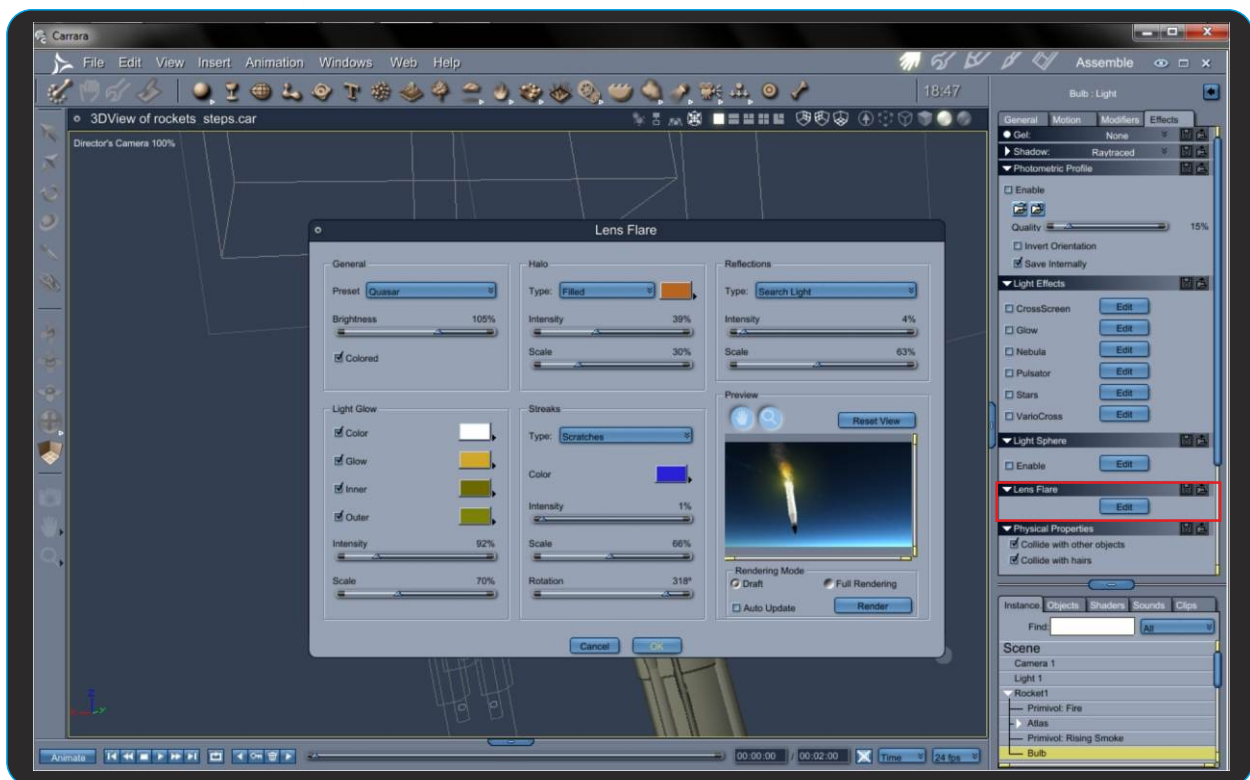
Your image should be similar to the one pictured.

I want to take a moment to remind you how important it is to pay special attention to your camera angle. The image shown is rendered at the wrong angle for the Primivol effects to render properly. In layering your effects you must always remember that camera angle is important.





Lights also play an important role in making our effects more believable. Using a bulb light with a lens flare post effect creates a fluent blend between fire and rocket engine. It also strengthens the impression of the fire being very hot. First, you need to insert a bulb light into your scene and locate it above the rocket engines. We don't need it to cast any light, so I recommend that you set the brightness to 0. What we need to do is activate the lens flare effect. Navigate to the effects tab of the bulb light. Find the Lens Flare section and click the Edit button. The image shows the lens flare settings for this project.

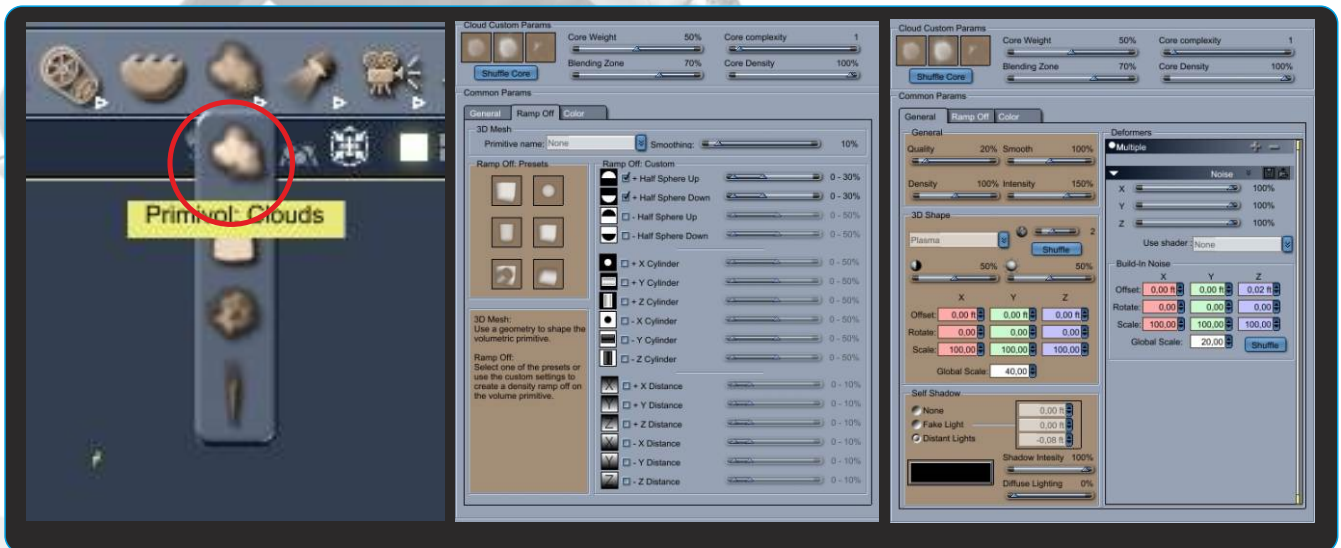


Once we have the lens flare set up, we need to group our effects objects. Hold down the shift key and select the Primivol Fire, Primivol Rising Smoke and the bulb light, go to the Edit menu and select Group. Now, you can name your group. Choose a name that will make sense to you like Rocket1 or Rocket Effects. This scene has 3 rockets, so once you've grouped your effects objects, all you have to do is duplicate the group, one for each rocket, and position the groups as you like or follow the composition of the image below.





Adding clouds to our scene is the final touch in creating a more believable rocket scene. You can actually use Carrara's native cloud system, but I used Primivol clouds. Insert the Primivol clouds primitive. Again you are faced with many choices in the edit room for the clouds, but we will only be focusing on a few.

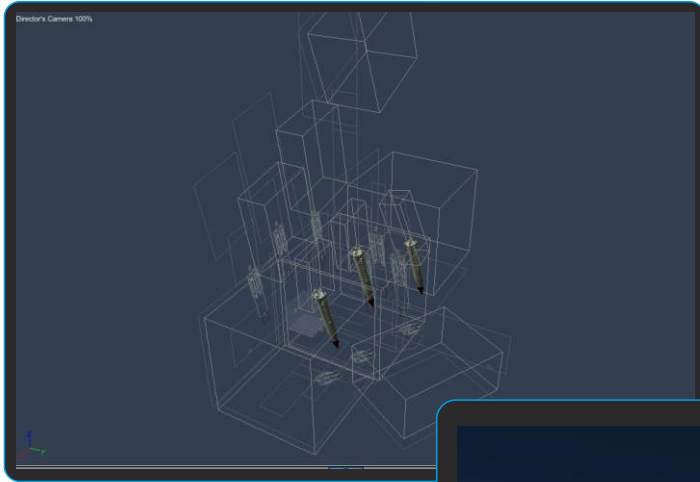


Cloud Custom parameters are left at their default values.  
General values are also left at their default values.  
In the Deformers panel we add a Noise modifier with settings:  
Offset: x=0, y=0, z=0.02 ft.  
Rotate: x=0, y=0, z=0  
Scale: x=100, y=100, z=100  
Global Scale: 20

#### Ramp Off settings:

Both + Half Sphere up and Half Sphere down should be marked. Limits for both are 0-30%. This gives the cloud a spherical shape.

Scale the cloud to your liking and duplicate it. Locate the duplicate cloud to another location and rescale it. For each duplicate, you can click one of the three cloud icons in the Cloud Custom parameters palette. These options can greatly influence how your cloud looks once rendered, so you don't need to edit any other settings. Make sure to create a new master for each duplicate otherwise you will modify all duplicates instead of just one.



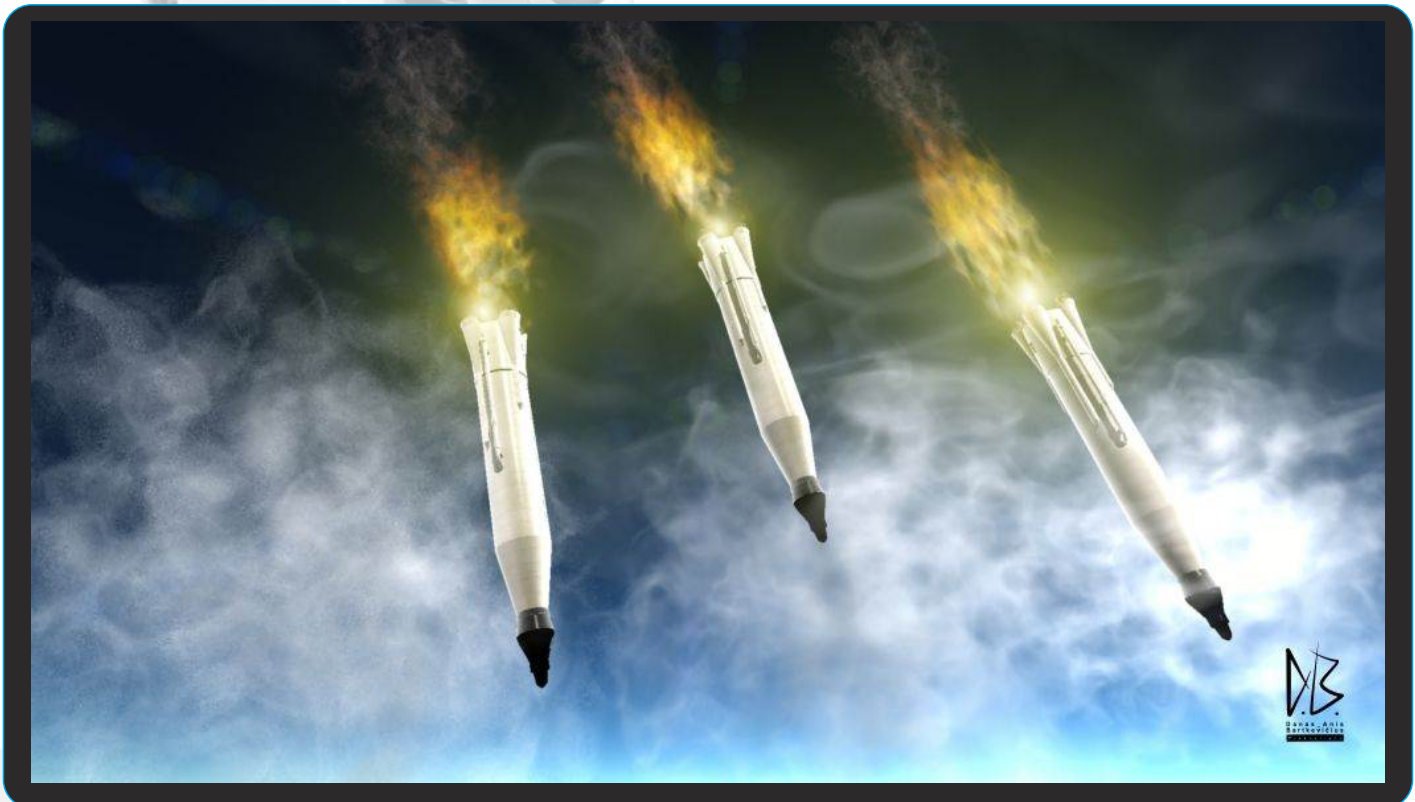
Here, again, smart placement is the key. Primivol Clouds, like other Primivol primitives, can't intersect with any other Primivol primitives. If you take a look at my prepared scene, you will see that none of the Primivol primitives intersect. If you look closely, you will see the clouds are actually under the fire and smoke of the rockets, but in the final render the clouds look like they are behind the rockets. This is why this scene must always be rendered from the bottom of the objects and not the top. Another trick here would be to have a light cloud in front of the camera. This will give you a feeling of depth and will also hide any small imperfections in the scene.ew master for each duplicate otherwise you will modify all duplicates instead of just one.

Primivol is a very exciting plug-in for Carrara. It has so many options you'll probably never use them all. Primivol's unique ability to blend and change with the addition of even the smallest scene element makes you more than an artist, it makes you an illusionist.

I hope you enjoyed this tutorial and that you found it useful. Carrara is a powerful tool that is easy to learn and fun to use. Add Primivol and the sky's the limit.

Best regards,

Danas



Visit [www.carrara3dexpo.com](http://www.carrara3dexpo.com) in order to download the scene file.



4361727261726120334420617274

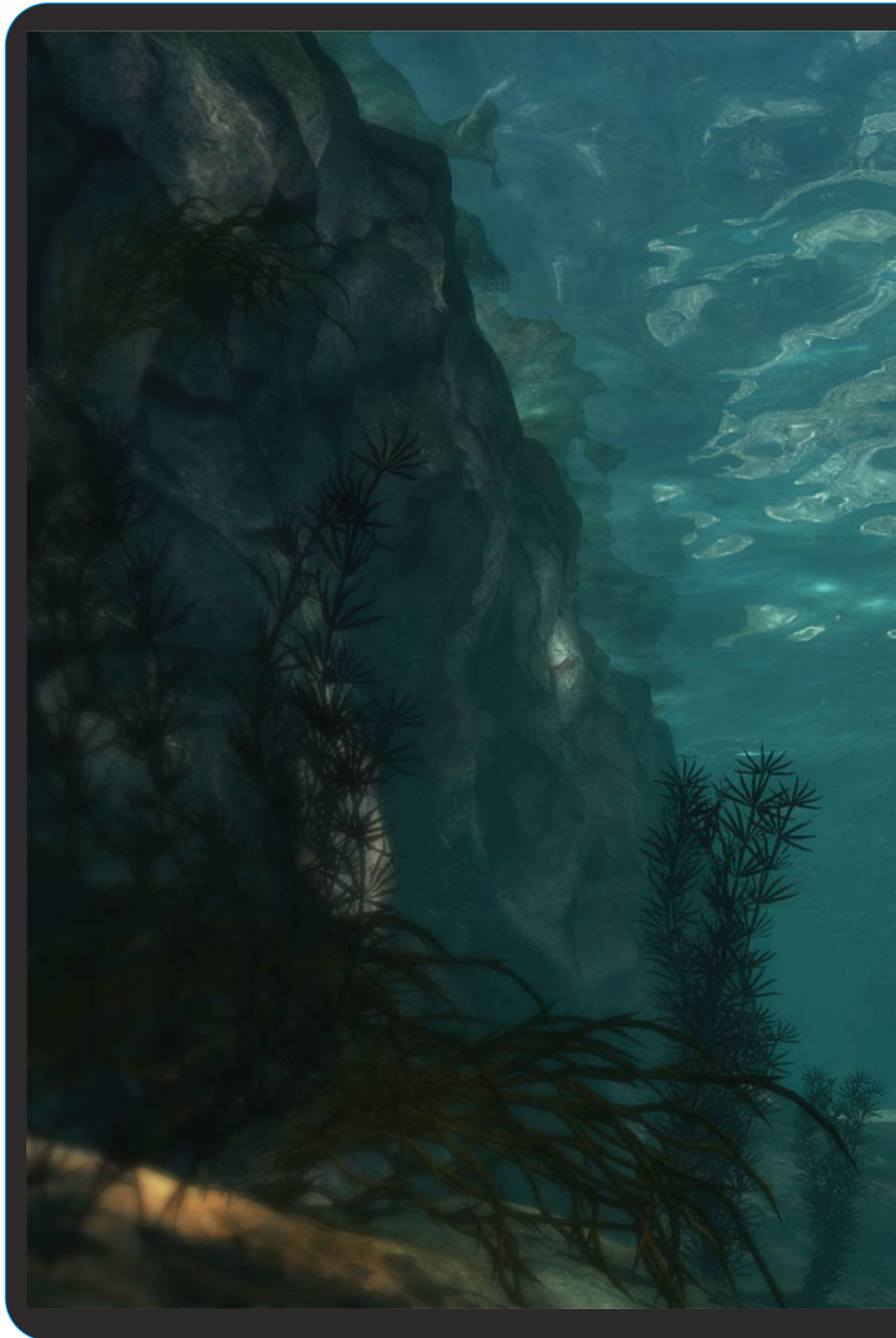
**Carrara 3D art**

# Gallery

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# Phillip Drawbridge





steampunksubmarine



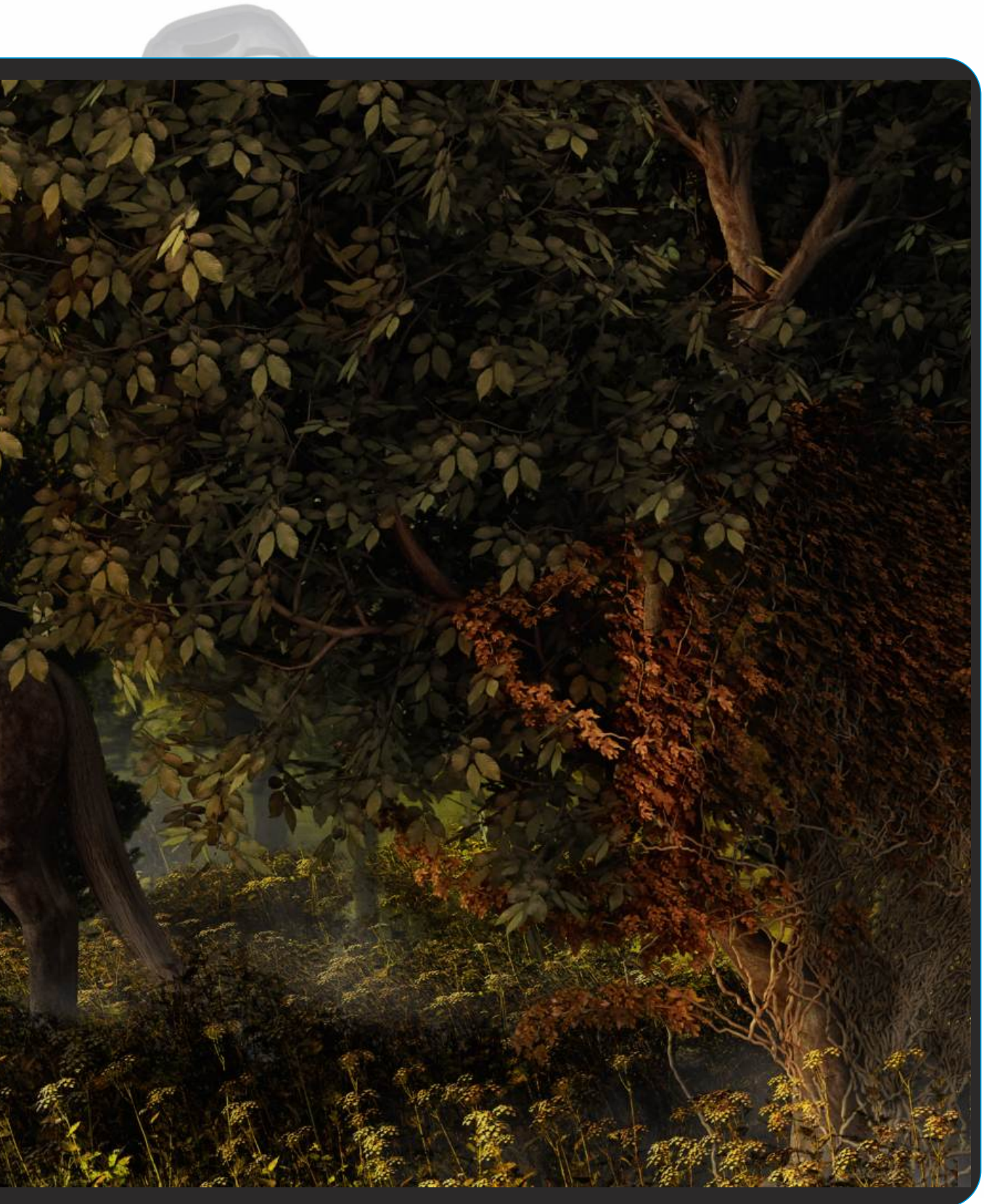
©Phillip Drawbridge 2010  
Modelled in Wings3d rendered in Carrara 8  
Carrara 3d Expo Magazine



# Piet Francke







horse Wfog





wind mill

# Nick Burridge



Decapped Bong

## David Collins



Neglected



**Faba**

Carsten

# Chris Poole



Image by Jack Daniels and Chris Poole

One for the road



xerxes

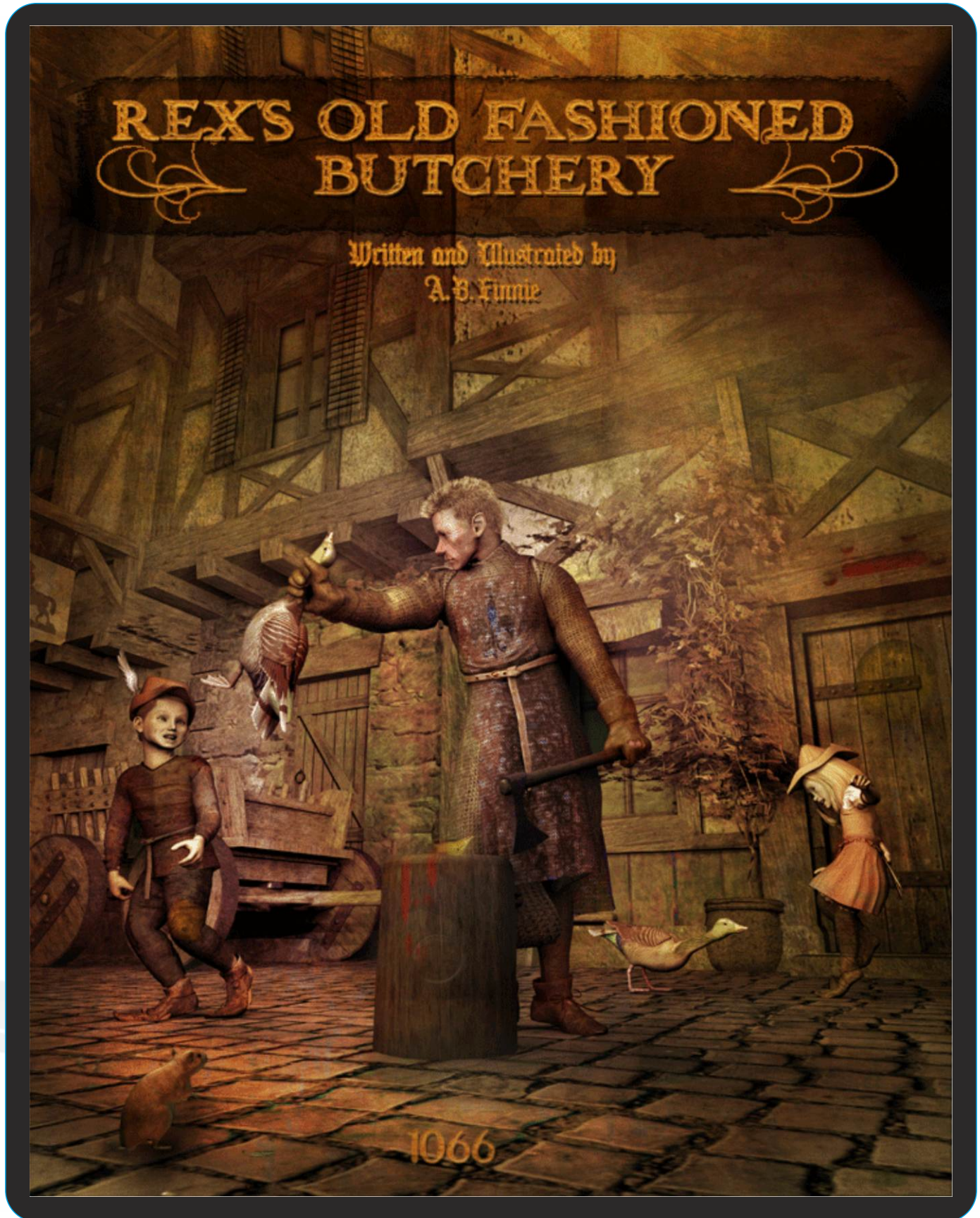


# Andrew Finnie



waxfin@gmail.com







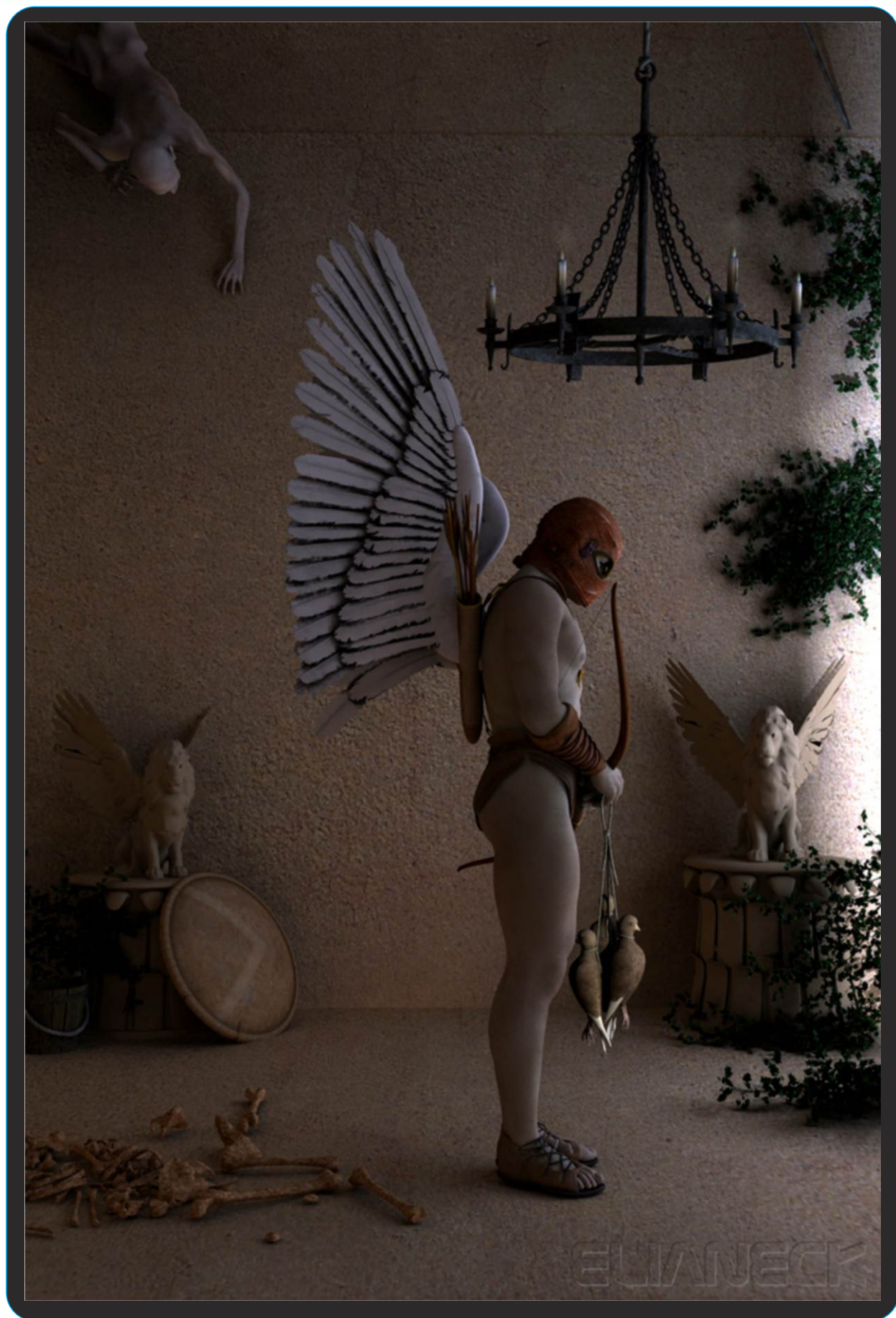




## Eliane Camargo



face-pra-web-grande



Dark Angel





Soldier-Grande



In Blue



# Dimension Theory



Slice of Heaven





612



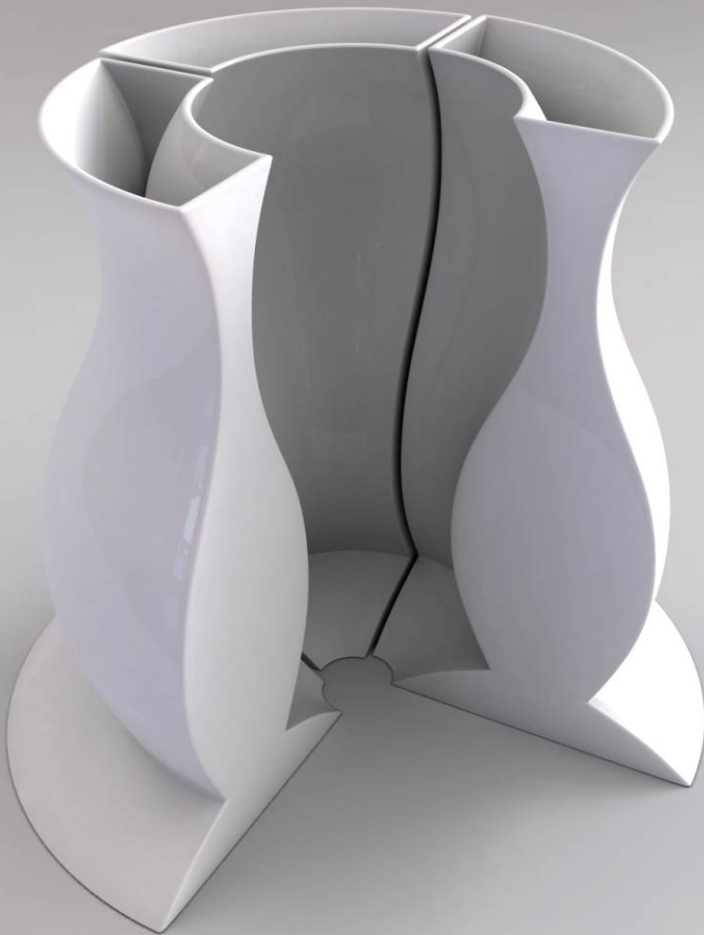
Breakfast



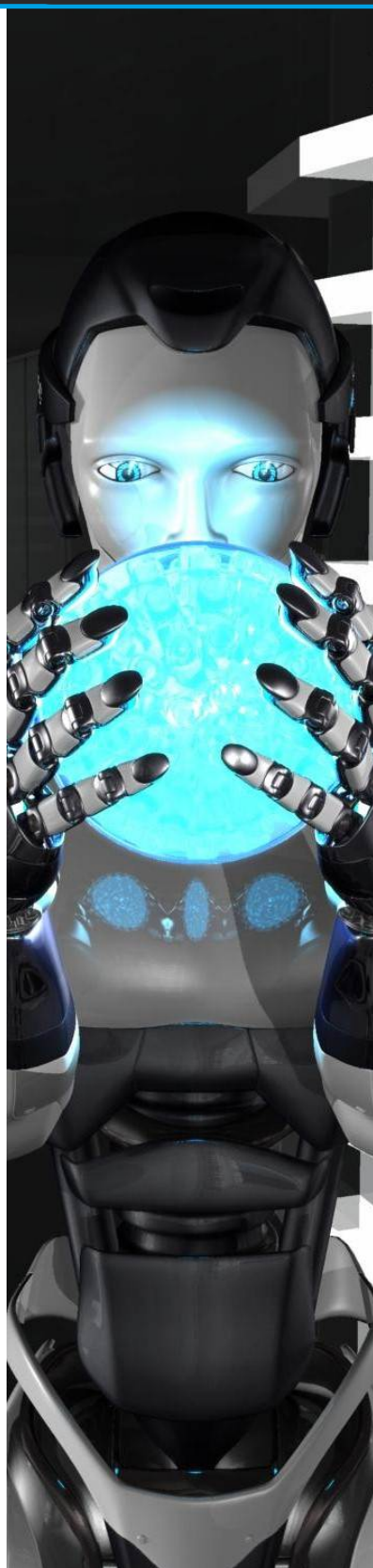
Earth 2



## Denis Richter



Vase



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contact: [danas.anis@gmail.com](mailto:danas.anis@gmail.com)

Thank you all for supporting and helping us.  
Special thanks to all artists for their wonderful  
art.

76f726bda73686f776e206865726520697320617274776f7  
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