

Milady Bridges

Demo Reel Breakdown

Cigarette Smoke 00:00:05-00:00:31

A cleanplate was provided by the paint department where all practical smoke was removed from the plate. If a camera track was not provided, I would track the shot in 3DEqualizer and hand track the cigarette. Because these effects were stereoscopic, the track had to fit into the converted space provided by the depth artist. Not only did I need to match the camera track, I also needed to match the 3D space. This sometimes required bending the effects as the converted stereo space was never linear.

Using Softimage ICE, I made a particle simulation to recreate the cigarette smoke. Instead of using 'real' lights to light the effect, simple nulls were used to tag each particle. By moving the particles into the nulls' world space and using simple math to determine which particles would be affected, the simulation did not suffer any increases in calculation time. Render time was also greatly improved by avoiding the use of real lights. Lighting was then completed in the compositing stage.

After rendering my effects, I was then responsible for compositing them into the final plate. All stereo compositing was done in Nuke.

Bubbles 00:00:32-00:00:43

The client wanted the underwater shots to feel immersive in the stereoscopic version of the film (Titanic). I worked on the look dev of the bubbles and then applied the same look to similar shots.

Using Softimage ICE, I made multiple particle simulations to create the feeling of bubbles rushing towards the camera while also exaggerating the trail of bubbles formed by the force of the propellor through water.

After rendering the effects, I was then responsible for compositing them into the final plate. All stereo compositing was done in Nuke.

Dust/Volumetrics 00:00:45-00:01:04

The client wanted to fill the empty space with dust particulates to enforce the 3D aspect of the film, as well as create an immersive environment for the viewer.

Using Softimage ICE, I placed volume emitters in key spots of the shot that would populate with particle strands twisted to look like lint or other atmospheric particulates. From there I would add any forces necessary to further integrate the simulation into the shot. Sometimes it was necessary to add obstacles with which the particulate simulation could interact. Lighting was the same as the cigarette smoke where nulls were used in place of the 'real' lights.

After rendering the effects, I was responsible for compositing them into the final plate using Nuke.

Flotsam 00:01:06-00:01:19

The client wanted to fill the empty space with particulates to enforce the 3D aspect of the film, as well as create an immersive environment for the viewer.

Using Softimage ICE, I created a particle system that simulated the look of floating underwater flotsam that would occasionally get caught in small eddies created by the environment. Using obstacles to repel particles as well as simple curves to direct the flow in certain areas, I was able to fill the tank with hundreds of thousands of particles, thereby making a much more engrossing environment.

After lighting and rendering the effects, I was responsible for compositing them onto the final plate using Nuke.

Tank Explosion 00:01:19-00:01:26

I augmented multiple effects into this shot to make it more stereoscopically immersive.

Smoke/Spray: I added a layer of smoke to the top screen right of the shot, and a misty spray to the bottom screen left.

Glass/Debris: Using Exocortex's Implosia, I recreated the tank and shattered it. I then simulated some of the pieces to move towards the camera through the air, and others to collide with the ground plane.

Bokeh: I created a simple particle simulation that shot discs into the air in timing with the practical effect in the shot. I then randomized the color and opacity per frame to recreate the shimmering effect.

I was responsible for lighting, rendering, and compositing all my effects into the final plate of the shot. All stereo compositing was done in Nuke.

Snow/Fog 00:01:28-00:01:38

I added additional snow to fill in the shot using Softimage ICE. The client specifically wanted snow to flow into the open doors of the building, as there was no practical snow doing this.

I also added a snowy mist/fog in all 3 shots. The first two have fog moving under the bridge. In the last shot I augmented the snowy cloud crawling along the screenright mountain side. These particle simulations were also created in ICE.

I was also responsible for the lighting, rendering, and compositing of all my effects into the final plate of the shot. All stereo compositing was done in Nuke.

Smoke 00:01:40-00:02:20

Smoke is incredibly difficult to depth in 3D conversion. Because of this, it was my task to augment smoke effects into the film that match the stereo conversion, while at the same time cover up the original, practical smoke that is stuck to the background.

I created all smoke effects in Softimage and lit these effects using ICE. It is the same technique explained in the cigarette smoke portion of the breakdown. I used nulls as a type of spotlight, and was able to tag particles for lighting. The advantage to lighting in ICE is not only the speed, but I can also invert my lights and isolate the particles that are cast in shadow. From here, I can then manipulate the lighting as I see fit in the compositing stages. It was also common to have to recreate many objects in the scene to interact with the simulations, as well as the lighting.

I was also responsible for the rendering and compositing of all my effects into the final plate of the shot.

Rain 00:02:22-00:03:00

Rain is another effect that is difficult to depth in 3D conversion. I was tasked with building a rain rig for the department using Softimage ICE. The final version of the rig consisted of ICE strands whose shape could be altered to change from a straight streak to a drop with bends in it. The rig itself could be easily manipulated to change the direction and angles at which the rain would fall, among other features that helped the artist to better integrate their simulation into the shot.

For each shot, I augmented rain to fill in the stereo space. I tracked many of these shots using 3DEqualizer. For the Jurassic Park shots, there was a hood over the camera which created an obvious gap of rain in certain angled shots. For example, in top down shots, it was important to the client that this gap be filled.

I was also responsible for the lighting, rendering, and compositing of all my effects into the final plate of the shot.