

Demo Reel Shot Breakdown

- **Pigman**

Software Used: Nuke, AfterEffects, , Photoshop, PFTrack, Maya

Work Involved: MoCap Matchmoving, 3D Face Replacement, Compositing

This shot was a personal project completed using test footage from FXPhD. I matchmoved two camera angles of this shot in PFTrack in order to create motion capture data for Maya. I then created geometry in Maya that matched to the face, removed the nose, added new nostrils, and created a wrinkled skin texture in Photoshop. The geometry was rigged to move with the face and capture the subtleties of the actor's facial gestures. The final renders were composited in Nuke and AfterEffects.

- **Wall Explosion**

Software Used: RealFlow, AfterEffects, Maya

Work Involved: Modelling, Dynamic Simulation, Shaders, Renders, Compositing

For this shot, I modelled the wall in Maya and created fractures by hand and using the Maya surface shatter tool. I then UV mapped and exported the model to RealFlow, where I simulated the dynamic collapse of the wall. I then re-exported to Maya to attach the shaders, light, and render the simulation as well as add dust particles. I finished the shot in AfterEffects with volumetric light rays, camera shake, motion blur, and color correction.

- **Naval Battle**

Software Used: Nuke, SynthEyes, Maya

Work Involved: Digital Matte Painting, Matchmoving, Renders, Compositing

This shot was created for the Smithsonian. I matchmoved the footage in SynthEyes, then created the fort as a simple digital matte painting in Photoshop. I lit and rendered the model ships in Maya, and created the dynamic flag in Cinema 4D. The final shot was composited in Nuke.

- **Skeletal Girl**

Software Used: AfterEffects, PFTrack, Maya, Mocha

Work Involved: Compositing, Matchmoving, Animation, Renders, Planar Tracking

I used PFTrack to matchmove the greenscreen footage and export 3D cameras to Maya and AfterEffects. I

then used the camera data to “matchamate” the ribs and guts in Maya and shade, light, and render it. The snowfall was created with particles using Particular for AfterEffects and the PFTrack camera data. The final key, composite, and color work was completed in AfterEffects. The actress' hand and arm exit the greenscreen and were tracked and rotoscoped in Mocha. The original footage is courtesy of FXPhD.

- **Boy on Bike**

Software Used: PFTrack, Maya, AfterEffects.

Work Involved: Matchmoving, Renders, Particles, Compositing

I matchmoved the shot in PFTrack and exported the camera data to Maya and AfterEffects. I then rigged, animated, lit, and rendered the elephant using Maya. Rainfall was generated using particles and the PFTrack camera data in AfterEffects. The shot was then completed in AfterEffects. The original footage is courtesy of FXPhD.

- **Ships at Anchor**

Software Used: AfterEffects, Photoshop, Cinema4D

Work Involved: Digital Matte Painting, Renders, Compositing

I created the matte painting in Photoshop and composited it in 3D layers in AfterEffects. The ships were rendered from Cinema4D. This shot was created for the US Navy's Underwater Warfare Research Center.

- **Dragons in Flight**

Software Used: AfterEffects, Cinema4D, Maya

Work Involved: 3D Exports, Renders, Compositing

For this shot I exported the dragon models and animations from Maya as MDD vertex data, then lit and rendered them from Cinema4D. The final image was composited in AfterEffects. I also served as visual effects supervisor for a team of artists on this film. Footage courtesy of DragonHunter LLC and director Steve Shimek.

- **Destroyed Village**

Software Used: AfterEffects, Maya

Work Involved: CG Models and Textures, Renders, Compositing

For this shot I first created simple stand-in building geometry, then projected images onto them in Maya. I then lit and rendered the scene from Maya, including a displaced and projected version of the ground to catch shadows and lighting detail. I exported the dragon from Maya to Cinema4D as MDD vertex data and

composited the final shot in AfterEffects. The final shot was completed in a single evening. I also served as visual effects supervisor for a team of artists on this film. Footage courtesy of DragonHunter LLC and director Steve Shimek.

- **Car Crash**

Software Used: PFTrack, Maya, AfterEffects

Work Involved: CG Fence, Matchmoving, Compositing, Particle Mud

I tracked the exterior footage provided by a camera mounted to a slow-moving ATV in a field in PFTrack, then created and rendered a CG fence for use in both shots. The car interior was filmed without movement and with a black drape outside the windshield. The driver and broken windshield were filmed in separate passes. In AfterEffects I composited the broken windshield into all shots, added the environment, created the motion of the car and camera, created particle mud spray, and replaced the sky. Footage used by permission of Go Films.

- **Tree in Rain**

Software Used: Cinema4D, AfterEffects

Work Involved: Shaders, Renders, Animation, Compositing, Particle Rain

I was given only 72 hours to do this and several similar shots for a commercial. I generated all of the 3D elements in Maya (the tree was modified from a stock model purchased online). I exported these elements and the camera motion to Cinema4D for lighting and rendering. An ambient occlusion pass was rendered from Maya. The rain and 3D composite were completed in AfterEffects. The renders had to be heavily optimized to be completed in HD in under 15 seconds a frame (including displacement for the mud). I was also responsible for the artistic design of this piece, and all work was completed within the deadline. Footage used by permission of Solar Monkey Media.

- **Arrowhead**

Software Used: Maya, AfterEffects

Work Involved: Shaders, Renders, Compositing

For this television commercial for Solar Monkey Media I shaded, lit, and rendered the arrowhead in Maya. I also created the environments and look of the shot in AfterEffects.

- **Dragon Shots**

Software Used: AfterEffects, Cinema4D, Maya

Work Involved: 3D Exports, Renders, Compositing

For this shot I exported the dragon models and animations from Maya as MDD vertex data, then lit and rendered them from Cinema4D. The final image was composited in AfterEffects. I also served as visual effects supervisor for a team of artists on this film. Footage courtesy of DragonHunter LLC and director Steve Shimek.

- **Burning Ships**

Software Used: AfterEffects, Photoshop, Cinema4D

Work Involved: Digital Matte Painting, Renders, Compositing

I created the matte painting in Photoshop and composited it in 3D layers in AfterEffects. The ships were rendered from Cinema4D. This shot was created for the US Navy's Underwater Warfare Research Center.

- **Shanghai street scene**

Software Used: Fusion, Mocha, Photoshop

Work Involved: Compositing, Rotoscoping, Lighting, and Maya Rendering

The original plate involved a large crowd in the foreground. I stabilized the camera movement, then exported multiple frames. Using these frames I was able to use Photoshop to generate a clean background plate. I then rotoscoped the man with the cart using Mocha, lit and rendered the tank in Maya, and then composited all of the elements together with stock smoke elements in Fusion. The original footage is courtesy of FXPhD.

- **Snow**

Software Used: Mocha, Nuke, AfterEffects

Work Involved: Compositing, Matte Painting, Particle Snow

The two women were tracked and rotoscoped in Mocha. The matte painting snow was created in Photoshop and composited in Nuke. The falling snow was created in Trapcode Particular for AfterEffects. Footage used by permission of Mirror Films.

- **Rooftop crane**

Software Used: PFTrack, AfterEffects

Work Involved: Compositing, Matchmoving, Particles

I tracked the shot in PFTrack and exported the camera data to AfterEffects. The additional people added into the street were greenscreen elements shot from a small crane from about 15 feet. They were keyed and used as 3D cards inside AfterEffects for placement in the street. The flock of birds was then generated using

Particular in AfterEffects, and the final shot was color corrected and composited. Please note that the blurring and vignette was in the original footage, and had to be both matched in the composite and compensated for in the track.

- **Oil Rig burning**

Software Used: Nuke, AfterEffects, PFTrack, Mocha

Work Involved: Compositing, Matchmoving, Planar Tracking

This shot was a personal project completed using miniature footage from FXPhD. In addition to the general composite I matchmoved the shot in PFTrack to add the sky, stock flames and smoke. I also generated the water droplets on the lens in AfterEffects. Certain tracking markers and damaged areas were planar tracked and replaced using Mocha. The shot was completed in Nuke.

- **Dragon Roar**

Software Used: AfterEffects, Cinema4D, Maya

Work Involved: 3D Exports, Renders, Compositing

For this shot I exported the dragon models and animations from Maya as MDD vertex data, then lit and rendered them from Cinema4D. The final image was composited in AfterEffects. I also served as visual effects supervisor for a team of artists on this film. Footage courtesy of DragonHunter LLC and director Steve Shimek.

Contact

rob@rfanimationllc.com

758 N Black Horse Loop, Spanish Fork, UT, 84660

www.rfanimationllc.com

(801) 798-2822