

## **Dominic Alderson**

### **Reel 2009 - Shot Breakdown**

#### **Forest Snake**

##### **Breakdown:**

Originally, I had shot some footage of an old tree trunk which was going to be the basis for compositing in the snake. In the end, I decided the reel was going to be HD, which meant the footage would look terrible. I then opted to use the camera motion by tracking the shot and importing that into Maya as my initial camera. This gave a more fluid and realistic move to the shot – some smoothing was applied. I collected a full set of images and videos of the Boa snake as reference when modeling/animating. Using an HD camera, I shot a new background plate and this time decided to model the tree trunk so that I had more control over the look and style of the tree. I added a gobal over one of the lights as to replicate the shadows that the larger/higher trees would cast into the forest. All elements were rendered using Mental Ray and compositing was done in After Effects. All plant elements are 2D planes with dynamic cloth simulation to provide the gentle sway.

##### *Software:*

Modelled, shaded, rigged and animated in Maya.

Rendered with Mental Ray.

UV's created in UV Layout.

Camera motion was tracked using Boujou.

Animation was a mixture of blend shapes and controlled speed along a pre-defined curve.

Detail on the snake was achieved through hand painted bump/spec maps using Photoshop.

The tree trunk was modeled and detailed in Mudbox, numerous layers of images were applied to build up the final texture.

#### **Atomic Robo Cinematic**

##### **Breakdown:**

This piece developed from a desire to model a character based off a pre-existing concept in an effort to see how closely I could match the original. I decided that the best way to go about this would be to approach an artist and ask permission to model a 3D version of their character design. I have been a fan of the Atomic Robo comic series and thought he would make for a great model and so got talking with the artist. As I progressed with the character modeling/texturing, I decided to go one step further and develop an establishing shot similar to those found in computer game cinematics. This meant building an environment for him which would relate to certain aspects

of the comics context. The background ended up taking a lot more time to develop. There are over 40 texture maps in the scene, and the importance of going HD meant I had quite a few technical issues trying to squeeze numerous high resolution textures, detailed models and FG lighting from my desktop machine. The model was rigged with a majority of the binds being rigid given the character is a robot. The Setup Machine was used to help build the rig as I come from a Max background and miss the automated biped days. The trousers were modeled and then detailed in Mudbox. The animation on the trousers is dynamic cloth simulation, whereby I created proxy legs linked to the rig so that the cloth had a force to collide with. Smoke elements were added in After Effects from chroma key samples. All dust elements were created using fractal noise and ramps. The shot was tracked so that I could place further details into the scene without having to re-render i.e. the nuclear logo on the back wall.

When I showed the final animation to the artist, Scott Wegener, his reply was:

*“Woah-ho, awesome! I would say that overall you've nailed it, it looks really nice.”*

*Software:*

Modelled, shaded, rigged and animated in Maya.

Rendered with Mental Ray.

Details sculpted in Mudbox.

Animation created using The Setup Machine and keyframe animation using reference video of myself.

All textures painted in Photoshop and some projection painting was completed in Mudbox.

## **Trophy - Great White**

### **Breakdown:**

This shot was created in an effort to show my abilities to track, and composite a model into live action footage. The Great White was modelled in Maya, and then further work was done using Mudbox pushing the form and the smaller details to a more realistic level. The UV unwrap was done in UV Layout and all textures were painted in Photoshop whilst blending seams with the help of Mudbox.

I placed tracking markers for which I measured the distance and height from ground so that I had a perfect X/Y grid to work with. The track was done in Boujou. I painted out the tracking markers in every 20<sup>th</sup> frame and then used Mocha to help automate the remainder of the removal of tracking points. The result did not match with the video lighting and I ended up having to animate the levels over time to help blend the painted areas with the original wall.

I rendered out numerous layers to allow for further adjustments in After Effects. The video footage actually starts off very over exposed, and then the auto exposure feature on the camera kicks in and the lighting levels re-adjust. To compensate for this, and to make the model fit more convincingly with the background, I adjusted the lighting on the model over time until it matched the footage.

#### *Software:*

Modelled and shaded in Maya.  
Rendered with Mental Ray.  
Details sculpted in Mudbox.  
Tracking completed in Boujou.  
Paint removal completed in Photoshop and Mocha.  
All textures painted in Photoshop/Mudbox.

### **Female Bust**

Female head modelled in Maya with high detail sculpting completed in Mudbox.  
3 point lighting setup with custom clay like blinn shader.

### **Porsche 356**

Porsche poly modelled, shaded and lit in Maya.  
The photographic plate I shot on a farm. I also created my own HDR to reflect the environment when the model was rendered. The HDR was created in HDR Shop and Photoshop where I also painted out the camera/tripod. The camera information from the shoot was passed into Maya to setup the same camera virtually. The model was created from blueprints and shaded using Mental Ray mia materials.

### **End Credits**

At the cinema, 3D self portrait created in Maya. 2008.  
Raptor Photo composite modelled and rendered in 3D Studio Max. 2004.