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Todd Palamar



Mastering Autodesk®
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Figure 6.9 The same procedural cloth texture has been applied to both surfaces. The model on the left has 800 triangles. The model on the right has 28,800 triangles.

Figure 6.10 Blend shape deformations move in a straight line, which can cause problems for certain types of facial movements, such as blinking eyelids.

Figure 6.11 When the point order of the base mesh and the blend shape target do not match, strange results can occur when the deformer is applied.

Figure 6.12 A smile shape and a frown shape are added together to create a very strange expression.

Figure 6.13 A duplicate of the original head model is created.

Figure 6.14 The settings for the Move tool

Figure 6.15 The vertices are color-coded to indicate the falloff strength and radius of the Move tool when Soft Select is enabled.

Figure 6.16 The settings from the Modeling Toolkit.

Figure 6.17 The base model (left) and the completed smile blend shape target (right).

Figure 6.18 The completed narrow mouth blend shape target, the base mesh, and the smile blend shape target

Figure 6.19 The options for the blend shape deformer

Figure 6.20 The blend shapes are controlled using the blend shape sliders.

Figure 6.21 Activating the Paint Blend Shape Weights tool turns the model white, indicating that the selected target in the options is applied at full strength to all the model's vertices.

Figure 6.22 As the weights are painted, the side of the mouth moves into the mouthWide shape.

Figure 6.23 Two new blend shape targets have been created using the Paint Blend Shape Weights tool.

Figure 6.24 Sliders are added to the blend shape control window as the additional targets are added to the deformer.

Figure 6.25 The jellyfish model is created from groups of NURBS surfaces.

Figure 6.26 The settings on the wave1 tab change the shape of the wave deformer.

Figure 6.27 The squash deformer settings appear in the Attribute Editor.

Figure 6.28 The jellyfish is animated using a number of nonlinear deformers.

Figure 6.29 A node for each jiggle deformer applied to the surfaces appears in the Outliner.

Figure 6.30 Paint the weights of the jiggle deformer on the top of the jellyfish body, and then smooth them using the Flood button.

Figure 6.31 The options for the geometry cache playback

Figure 6.32 Duplicates of the original jellyfish are created to make a small jellyfish army.

Figure 6.33 The imported motion capture example is much larger than the HIK rig.

Figure 6.34 Apply the motion-capture example by changing the source in the Character Controls window.

Figure 7.1 View the scene from the position of the spotlight.

Figure 7.2 Activate a preview of the spotlight's shadow in the scene.

Figure 7.3 Choose the Production preset from the mental ray Presets menu.

Figure 7.4 The default depth map shadows have a grainy quality.

Figure 7.5 Two renders using depth map shadows. The left side uses a high-resolution map with no filtering; the right side uses a low-resolution map with high filtering.

Figure 7.6 Depth map shadows cast by directional lights appear very blocky.

Figure 7.7 Enable Detail Shadow Map in the mental ray Shadows settings.

Figure 7.8 The street corner is rendered with Samples set to 1 (left image), Samples set to 64 (middle image), and Detail Shadow Map enabled (right image).

Figure 7.9 Raytracing is enabled in the mental ray Render Settings window, and Use Ray Trace Shadows is enabled for the light.

Figure 7.10 Add softness to raytrace shadows by increasing the Light Radius and Shadow Rays settings.

Figure 7.11 When Ray Depth Limit is set to 1, the shadow is not visible in the reflection (left image). When it is set to 2, the shadow is visible (right image).

Figure 7.12 Ambient occlusion refers to the shadowing effect seen in the crevices of this photograph.