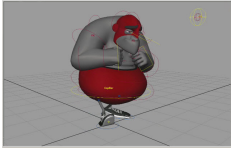
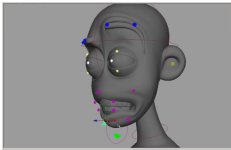
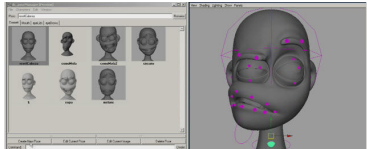
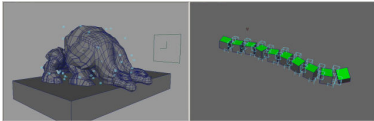

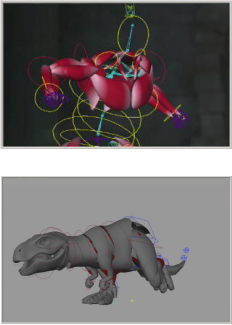

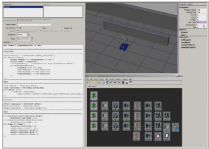
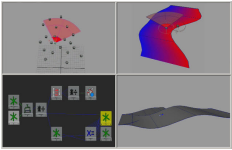


# David Corral

Reel 2005BreakDown

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Parts	Description
<b>Part 1: Capitan Barrios</b> 	<p>Scripted character rig, based on small and specific mels for standard features as FKIK in extremities and spine, squash &amp; stretch, foot and fingers.</p> <p>As well a "wave" squash system to change the volume through a joint hierarchy. All the scripts are connected with string attributes or script nodes, to get and set information from other parts of the body for a straight rig creation way, like structure, name conventions, rig options, and so.</p>
<b>Part 2: Facial Rig (Maya)</b> 	<p>Rig based on joint controls sliding through the character skull to keep the volume. The wrinkles are done with a corrective shape system based on position/distance. Each control it has at least 4 correctives (up, down, left, right) to set the wrinkles, of just fix the joint deformations.</p> <p>The corrective shape setup is done only with Maya utility nodes. The rig has a basic lip snapping using the same joints as deformers, with a squash and stretch control for the jaw.</p>
<b>Part 3: Pose Manager (Maya Scripting)</b> 	<p>Scripted pose manager, to save, apply, edit, export and import poses to a character body or face.</p> <p>Also you can make a snapshot or render from the current viewport directly from the GUI, and view them in different sizes.</p>
<b>Part 4: RagDoll Character (Maya Dynamics)</b> 	<p>The test is done with 2 rigs and 2 animations, one is a traditional key-frame rig and the other one is a dynamic rig, where you can blend both and release the dynamic one for a ragdoll simulation.</p> <p>The dynamic setup is developed with Maya rigid bodies, using different techniques and utilities to create a dynamic constraint with limits.</p>
<b>Part 5: Elastic Character</b> 	<p>Rig capable to stretch and bend the extremities and spine for a cartoon/stretchy effect. The bend can be animated translating the main control of each extremity; also you can tweak the curve doing it more soft or straight just with an attribute.</p>

<b>Part 6: Muscle Rigs</b>	<p>Based on non-procedural muscles behavior. Deforming muscles with blend shapes and applying them to the skin as an influence to produce an under laying effect. Based on fusiform muscles with 2 or 3 pivot/control points, done with joints for a faster behavior.</p> <p>This system has a per muscle jiggle and behavior, to set a different hardness depending the muscle type. Extracting the movement information of each muscle with particles, and applying it to a muscle offset.</p>
	
<b>Part 7: Maya Tetris</b>	<p>Fully playable game inside the Maya viewport, with score and different level difficulty. Done with Maya expressions.</p>
	
<b>Part 8: Robot AI (Maya Dynamics)</b>	<p>Procedural robot, with raycasting to "see" walls and obstacles. The demo reel version (a early system) was done with particles, utility nodes and expressions.</p>
	<p>Since the robot is able to see the walls it can skip them and trying to find the better way.</p> <p>Later, I did a new system with a self-developed raycasting/intersection plug-in done with Maya API, for a faster interaction.</p>
<b>Part 8: HerdSystem (Maya Dynamics)</b>	<p>Early crowd system developed in Maya, done with rigid bodies. Each agent has its range of vision, velocity, avoid, seek, flocking parameters.</p>
	<p>The agents are able to skip obstacles, "walk" on poly or nurbs surfaces, or going through a path using the UV or color.</p> <p>For more information about the system, take a look to herd system 1.0 reel in my webpage: <a href="http://davidcorral.com/reels/herd.htm">http://davidcorral.com/reels/herd.htm</a></p> <p>Currently I am working on a better/faster system done with Maya API plug-in for Maya particles. This new system (2.0) is capable to move up 1 million agents. (Still in development)</p>