Avatar Technical Specifications
Human, Non-human, Organic and Hard Surface Avatars

MODELING

• Model may be done in the software of choice. Final delivery should be staged in a recognizable 3D format (for example: .ma, .mb, .obj, .fbx, .ztl, etcetera)
• Models should be cleaned, including the removal of n-gons. Polygons are preferred four sided, three sided are acceptable.
• Avatars can be a mixture of soft body organic modeling (human or alien skin) and mechanical or robotic hard surface components.
• Avatars may vary in poly count but should range between 30,000 and 250,000 poly faces.
• All normals should face out.
• All geometry should be frozen and zeroed out to world space.

TEXTURING

• A single texturemap per effect.
  o That map can be 4k or 8k if needed, but should be a single map and UVs contained in 0-1 UV space per effect (UVs may not touch or cross map’s border edge).
• The following are the only texture effects allowed:
  o a single diffuse color, specular color, emissive color maps (8-bits per channel)
  o bump greyscale 0-1.0 range .5 centered _or_ a 'normal' map (16 bits per channel)
  o roughness greyscale 0-1.0 range - 0 is like chrome, 1 is like rubber (16 bits per channel)
  o Texture effects should be named as follows: diffColor, specColor, emissiveColor, bump, normal and specRoughness (which will affect both specular and diffuse)
  o UV layouts should not be restricted to any specific method, but should reflect efficient practices.

RENDERING

• All Submissions must include a front and side rendered view of the avatar in portrait view at 1080x1920 resolution as a .png or .jpg