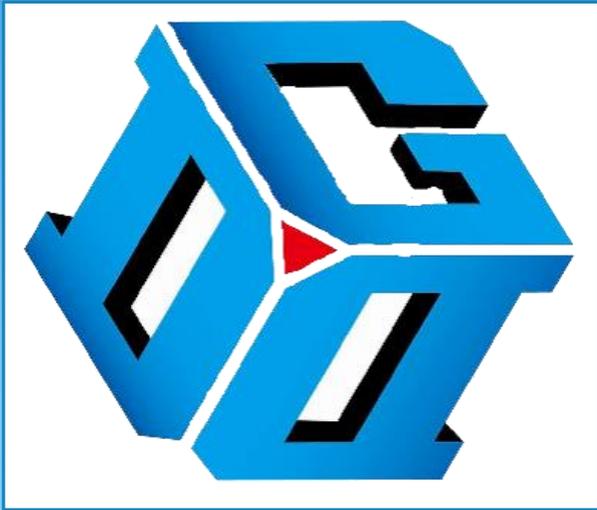


3D數位遊戲藝術



依照國際技術規範，3D數位遊戲藝術是培育3D角色製作的相關專業**技術**，包含：

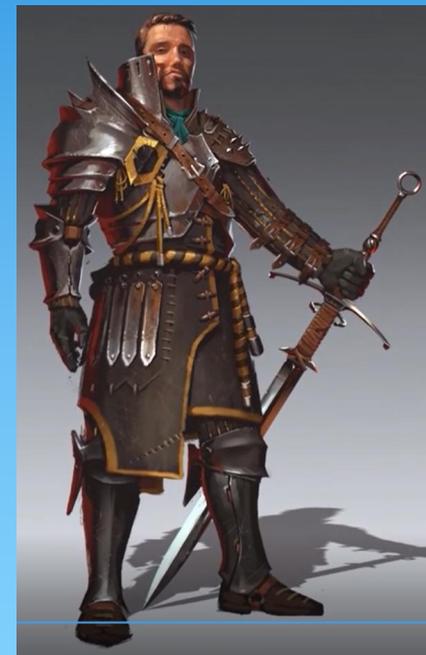
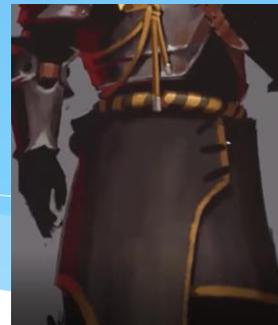
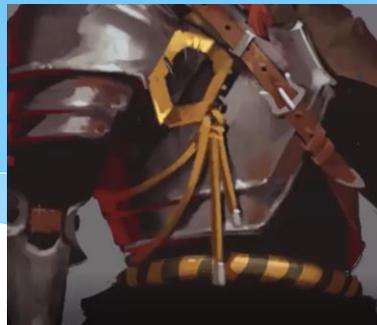
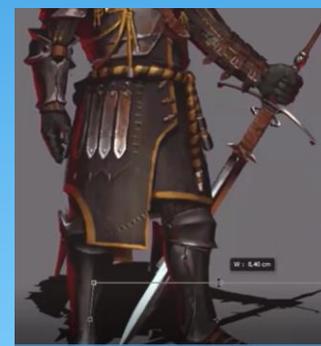
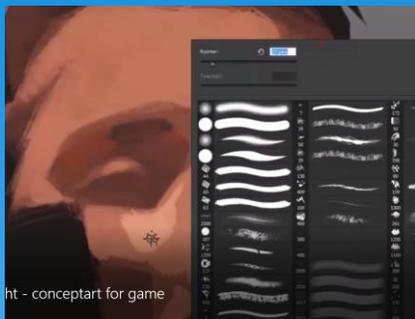
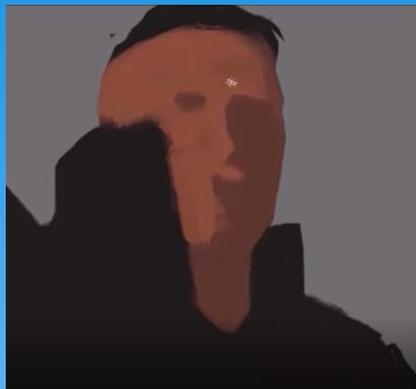
- (1) 角色概念構圖設計
- (2) 3D 角色建置與雕塑
- (3) UV 拆解技術
- (4) PBR 貼圖與材質製作
- (5) 骨架動畫製作
- (6) 匯入遊戲引擎展示等技術

都是目前相關職場業界急需的人才特徵。

角色概念構圖設計



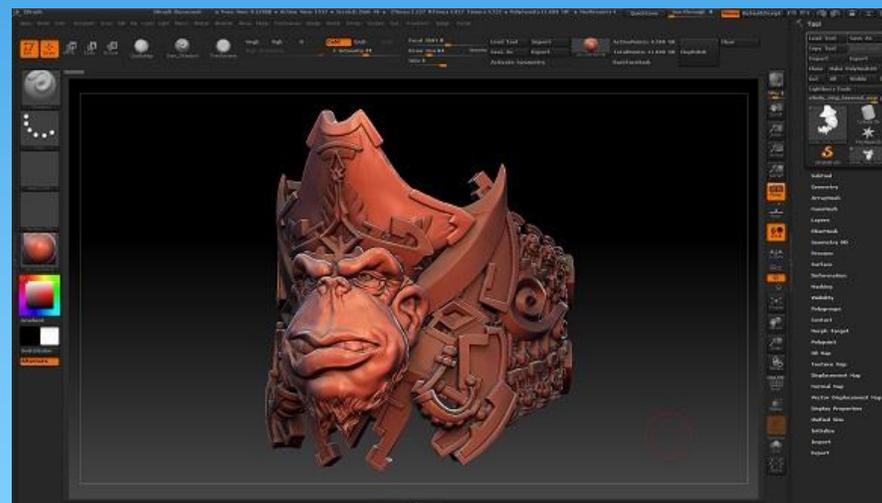
角色概念構圖設計



3D 角色建置與雕塑

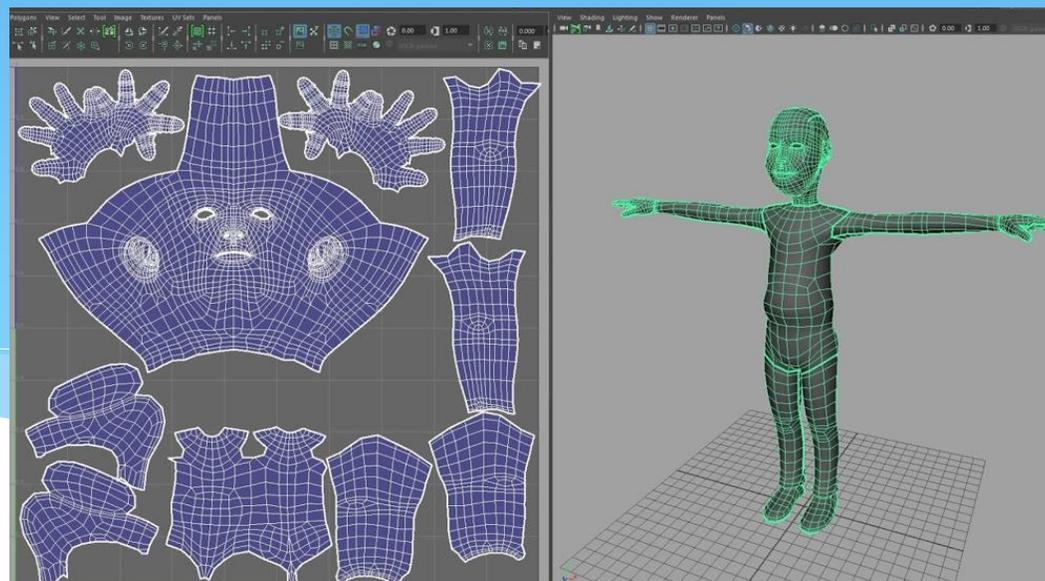
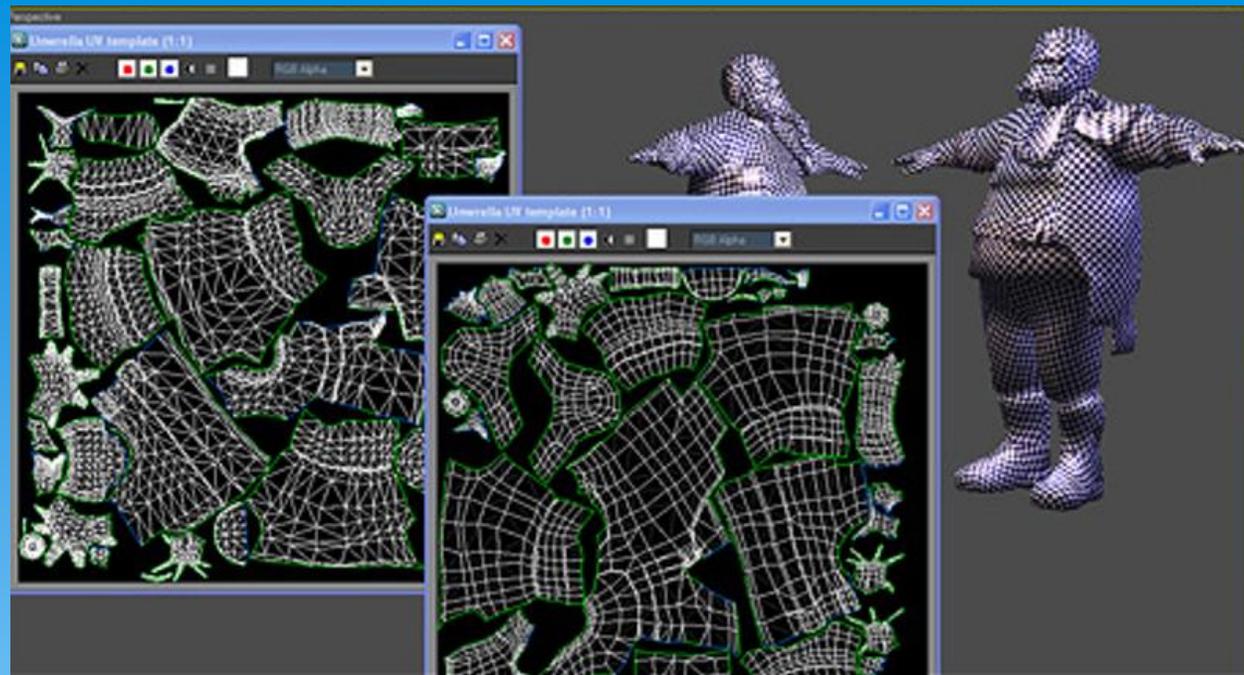
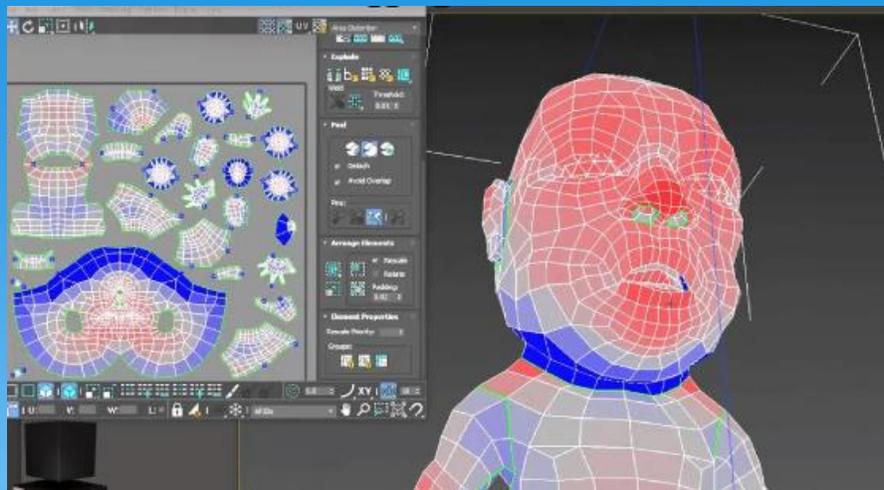


3D 角色建置(低模)

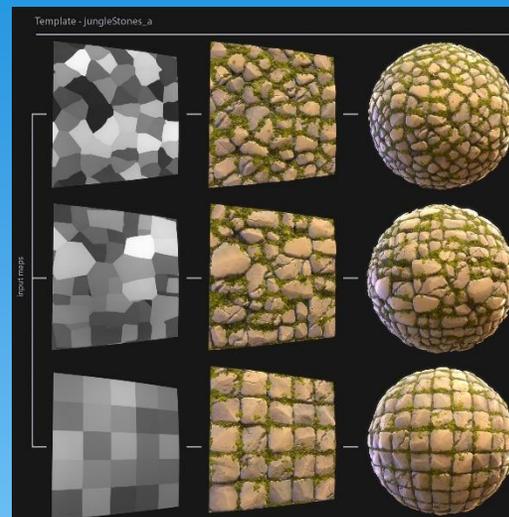


3D 角色雕塑(高模)

UV 拆解技術



PBR (Physic Based Rendering)貼圖與材質製作



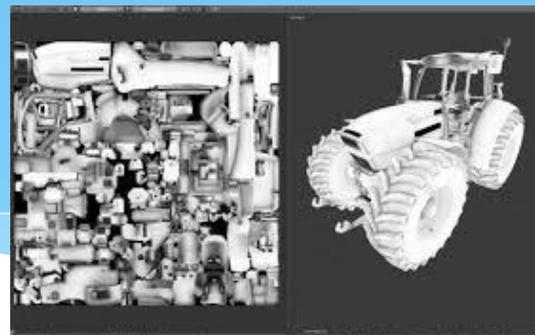
Diffuse 貼圖



Metal 貼圖



Normal 貼圖

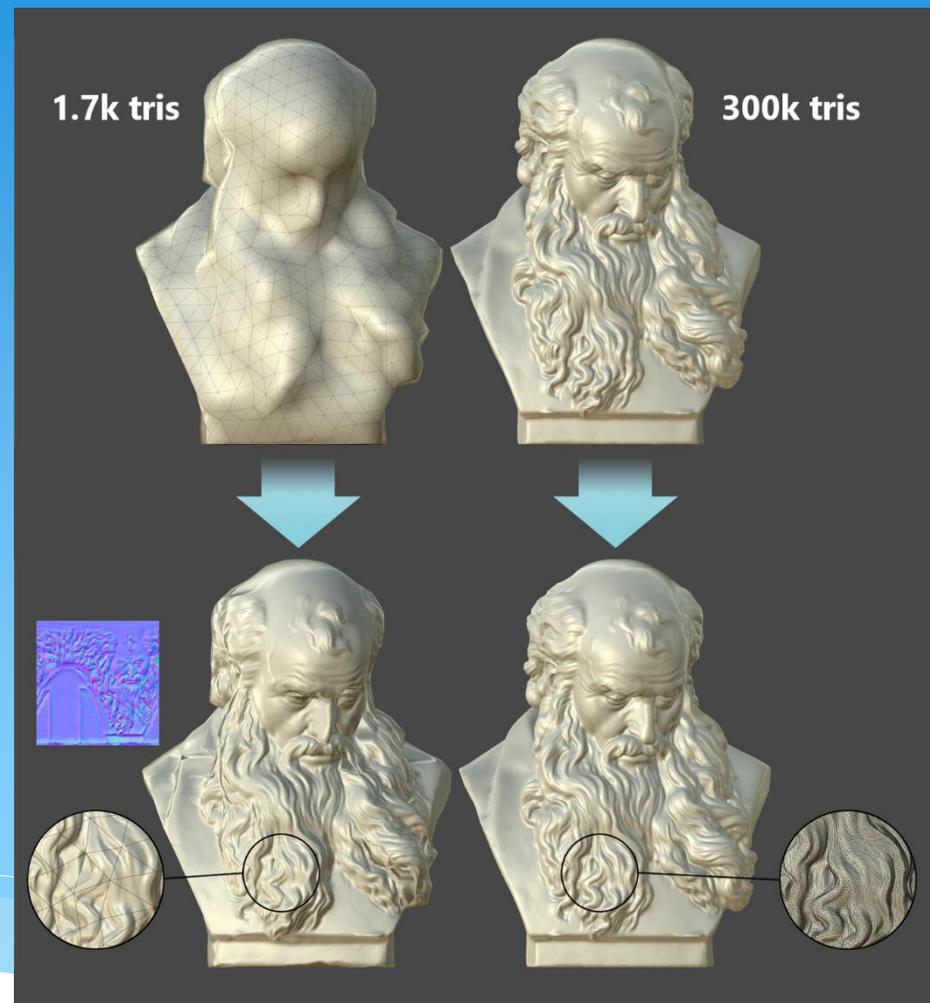


Ambient Occlusion 貼圖



Opacity 貼圖

PBR (P hysic B ased R endering)貼圖與材質製作(高低模)



PBR (Physic Based Rendering)貼圖與材質製作

TSC Texture Set Combiner
Christen Abma 2018

Texture Sets

TEXTURE SET LIST

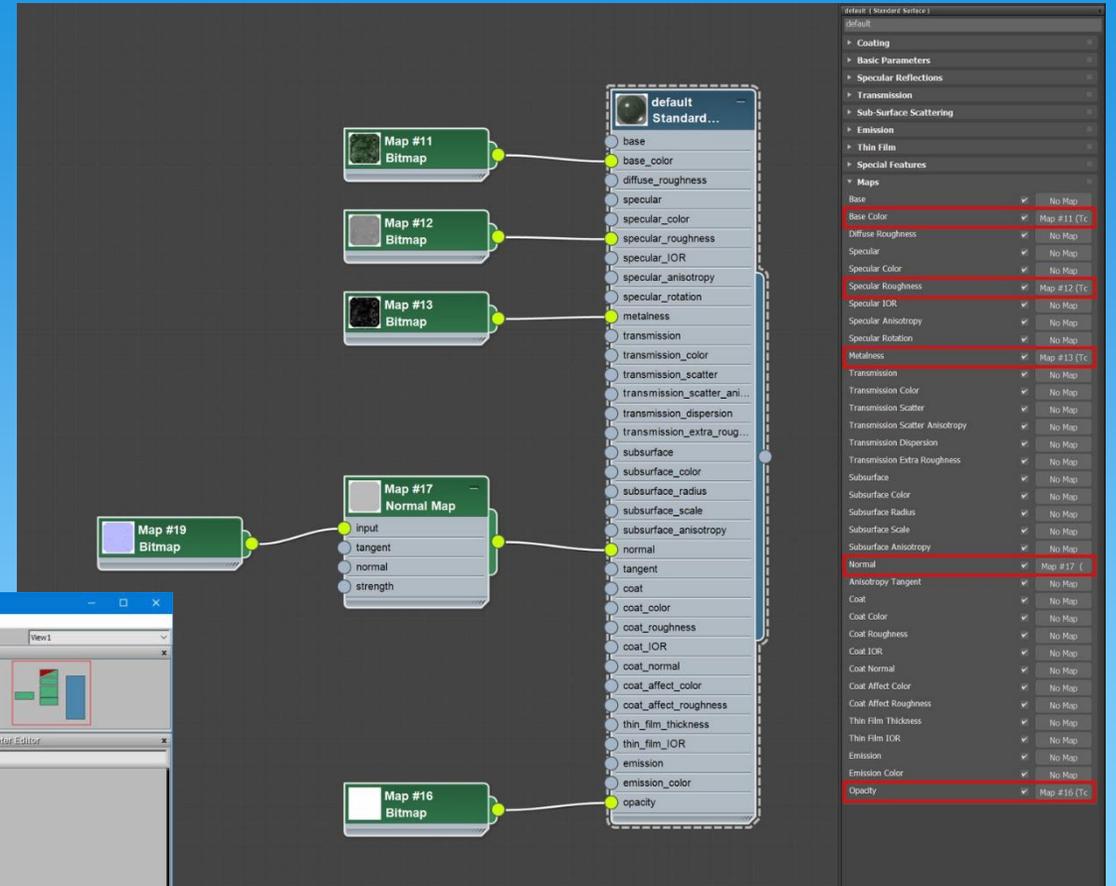
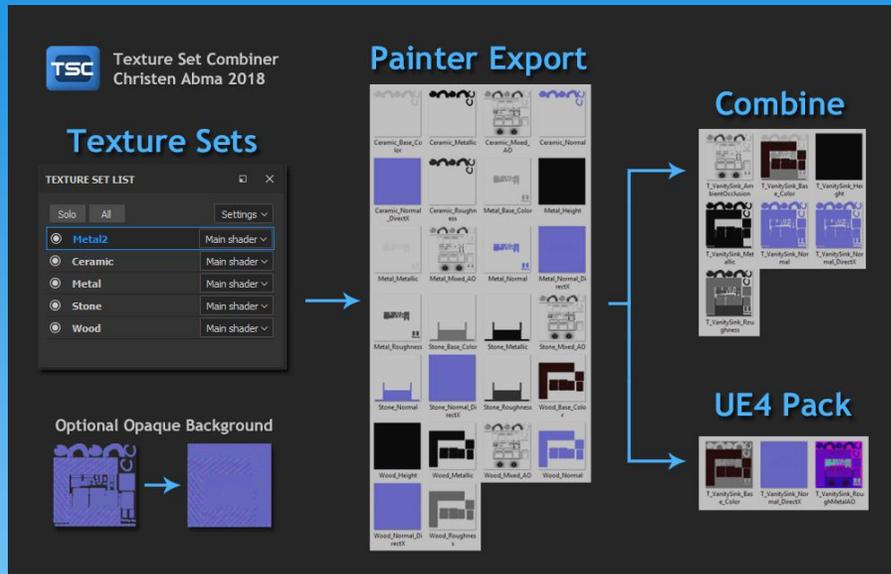
- Solo All Settings
- Metal2 Main shader
- Ceramic Main shader
- Metal Main shader
- Stone Main shader
- Wood Main shader

Painter Export

Combine

UE4 Pack

Optional Opaque Background



Material graph showing texture maps:

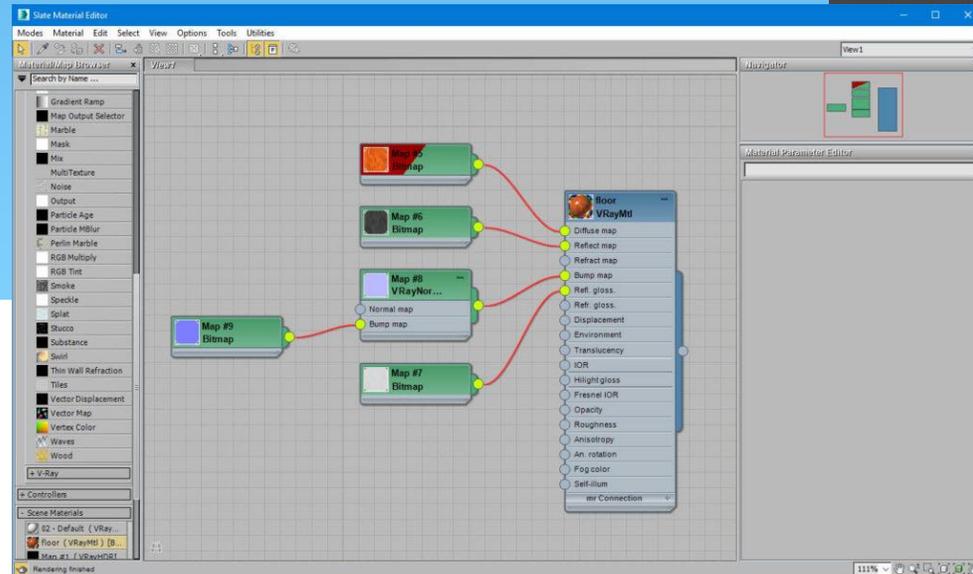
- Map #11 Bitmap
- Map #12 Bitmap
- Map #13 Bitmap
- Map #17 Normal Map
- Map #19 Bitmap
- Map #16 Bitmap

Material Parameters:

- base
- base_color
- diffuse_roughness
- specular
- specular_color
- specular_roughness
- specular_IOR
- specular_anisotropy
- specular_rotation
- metalness
- transmission
- transmission_color
- transmission_scatter
- transmission_scatter_ani...
- transmission_dispersion
- transmission_extra_roug...
- subsurface
- subsurface_color
- subsurface_radius
- subsurface_scale
- subsurface_anisotropy
- normal
- tangent
- coat
- coat_color
- coat_roughness
- coat_IOR
- coat_normal
- coat_affect_color
- coat_affect_roughness
- thin_film_thickness
- thin_film_IOR
- emission
- emission_color
- opacity

Material Parameters (Checked):

- Base Color ✓ No Map
- Diffuse Roughness ✓ Map #11 (TC)
- Specular ✓ No Map
- Specular Color ✓ No Map
- Specular Roughness ✓ Map #12 (TC)
- Specular IOR ✓ No Map
- Specular Anisotropy ✓ No Map
- Specular Rotation ✓ No Map
- Metalness ✓ Map #13 (TC)
- Transmission ✓ No Map
- Transmission Color ✓ No Map
- Transmission Scatter ✓ No Map
- Transmission Scatter Anisotropy ✓ No Map
- Transmission Dispersion ✓ No Map
- Transmission Extra Roughness ✓ No Map
- Subsurface ✓ No Map
- Subsurface Color ✓ No Map
- Subsurface Radius ✓ No Map
- Subsurface Scale ✓ No Map
- Subsurface Anisotropy ✓ No Map
- Normal ✓ Map #17 (TC)
- Anisotropy Tangent ✓ No Map
- Coat ✓ No Map
- Coat Color ✓ No Map
- Coat Roughness ✓ No Map
- Coat IOR ✓ No Map
- Coat Normal ✓ No Map
- Coat Affect Color ✓ No Map
- Coat Affect Roughness ✓ No Map
- Thin Film Thickness ✓ No Map
- Thin Film IOR ✓ No Map
- Emission ✓ No Map
- Emission Color ✓ No Map
- Opacity ✓ Map #16 (TC)



Material graph showing texture maps:

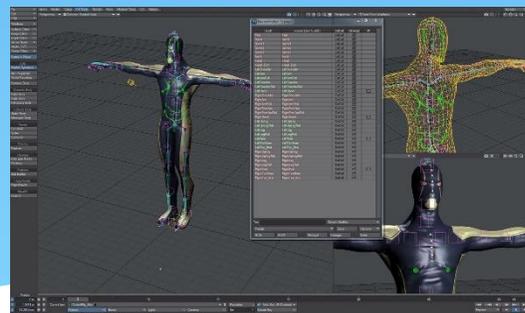
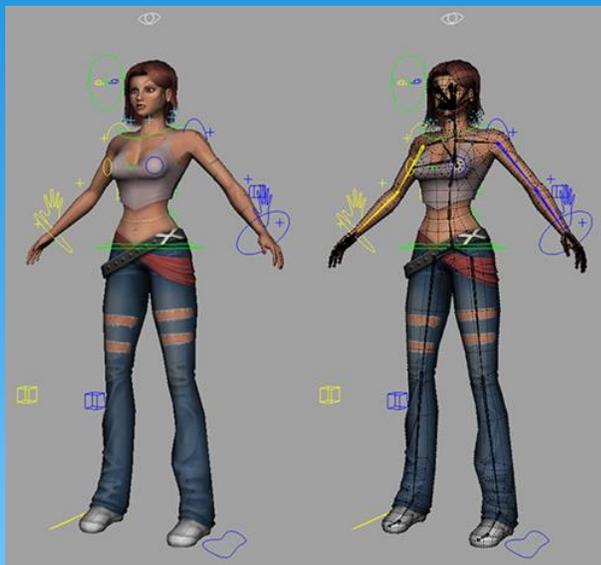
- Map #5 Bitmap
- Map #6 Bitmap
- Map #8 V-RayNor...
- Map #9 Bitmap
- Map #7 Bitmap

Material Parameters:

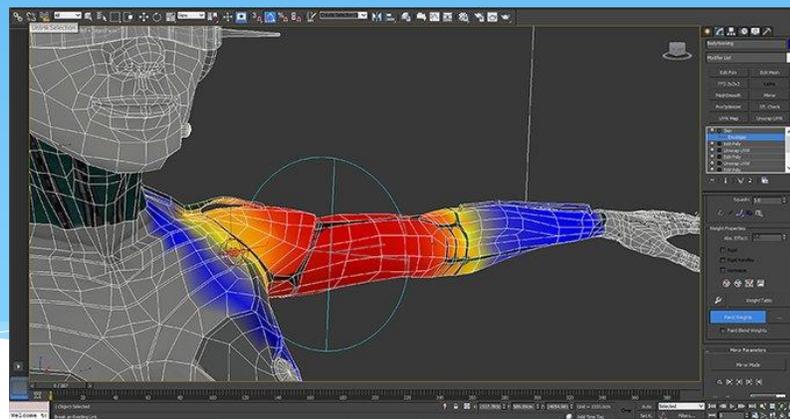
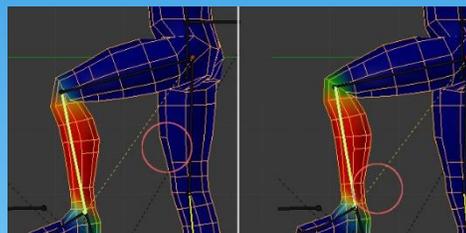
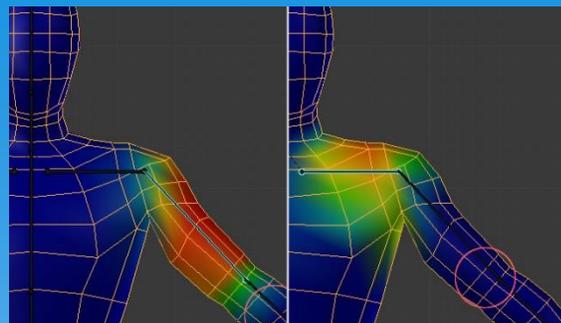
- Diffuse map
- Reflect map
- Bump map
- Ref. gloss
- Ref. gloss
- Displacement
- Environment
- Translucency
- IOR
- Highlight gloss
- Fresnel IOR
- Opacity
- Roughness
- Anisotropy
- An rotation
- Fog color
- Self-illum



骨架動畫製作



骨架設定(IK, FK)

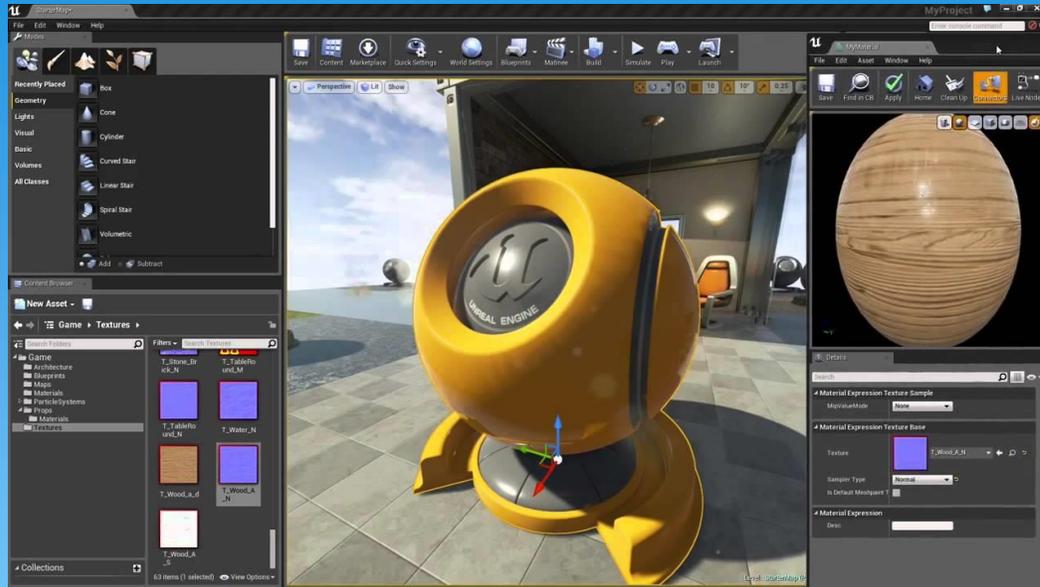


骨架蒙皮及比重設定



動作關鍵影格設定

匯入遊戲引擎展示技術



**UNREAL
ENGINE**