



Lighting, Modeling, Materials, Design, Houdini, 4k
 Populated a large scene with vegetation using Houdini's packed points system. Detailed rough hill geometry with procedural Height Field to utilizing cloth simulation tools. Developed materials in Houdini using custom user attributes, hsv variation, proximity masks, and shading vectors. Generated procedural trees with branch generator tools.



Lighting, Modeling, Materials, Design, GPU, 4k
 Created a large scale exterior environment and lit it in Octane on an RTX card. Worked at 4k resolution. Worked with vdb assets and mediums to develop volumetric effects. Distributed a swarm of bats and roof thatch using Mash. Modeled complex architecture using Zmodeler. Optimized the use of textures and geometry so the scene would fit in VRAM. Hand modeled stylized foreground rocks and created a Substance to match the style in the distance. Created a substance for a stylized fluvial pattern. Designed, modeled and posed a stylized creature. Arranged elements for compositional clarity.



Lighting, Modeling, Materials, Design, Unreal
 Utilized a hybrid lighting approach in Unreal, baking bounce light and using movable lights for real time raytracing. Employed Parallax Occlusion Mapping for the kitchen tiles and displacement for the shag carpet. Created textures in Substance Designer for floor tile, rugs, and insulation. Assembled scene in modular fashion in Substance Painter for texturing. Created build in Unreal utilizing clear translucency, subsurface translucency, and emission in GI. Developed a solution for shading very detailed masked lace surfaces at a distance. Modeled all elements in Zbrush. Created dust particles and subtle volumetric rays in Nuke.



Lighting, Modeling, Materials, Design, 4k
 Scattered rose petals using Mash, Modeled assets in Zbrush, Created procedural textures for lace, skin, burnt wood, and feathers in Substance Designer. Created Naturalistic rock textures with Zbrush surface noise and further embellishment in Substance Painter. Utilized Arnold Stand ins to speed up renders, Setup passes for Compositing. Matte Painted 2d elements for sky, smoke, and dust. Assembled, projected, and animated elements in Nuke. Arranged elements upon a stage to tell a story.



Lighting, Modeling
 Assisted in the modeling process incorporating notes from the client into the Zbrush sculpt. Lit the scene in continuity with the overall sequence using a master light rig and shot specific lighting. Worked in a large production pipeline using custom tools and assets. Responded to feedback in a timely manner. Interacted with other artists keeping communications open.



Lighting, Materials, Modeling
 Textured high resolution environments for anamorphic widescreen presentation. Created custom materials in Substance Designer and utilized them in Substance Painter. Created hero subsets for use in extreme closeup. Developed Lighting and looks across a sequence. Modeled assets in Zbrush.



Lighting, Materials, Modeling, Houdini
 Created rain, drips, and splashes in Houdini. Designed and sculpted characters in Zbrush, textured in Painter. Created wet map in shading network with vector state and noise nodes.



Lighting, Look Development
 Lit shots in Houdini with custom Houdini Digital Assets and pipeline tools. Worked with team to propagate updates across sequences. Refined lighting in specific scenarios on a shot by shot basis. Applied color matrix transforms to HDRIs from set, Painted out lights from HDRIs and extracted light textures, calibrated lighting for team from set photography, took shots to completion.



Matte Painting, Design, Lighting, Compositing, Modeling
 For this project I explored hard surface modelling techniques.



Matte Painting, Design, Lighting, Compositing, Modeling
 For this project I created many 3d architecture modules and used proxies to populate them around the environment. I created a matte painting for the diffuse channel and blended this with 3d lighting in comp. I created a setup where I could animate and control the light of the falling flares.



Matte Painting, Design, Lighting, Compositing, Modeling
 For this project I went on a shoot and captured a building and props from many angles. I used the images to generate a point cloud and solve the position of each image in order to reproject. I used 3d paint software to bake down and blend the projections in UV space. I generated mountains and dunes in procedural terrain generation software. I sculpted a large portion of high resolution cliff for the area closest to camera and blended it with the rest of the landscape using shader networks.



Look Development
 I began working on this asset in Apple's industrial design pipeline. I followed it down to MPC and converted it to their pipeline and an Arnold workflow. I untangled many layers of complex shader networks.



Lighting, Modeling, Look Development, Materials
 I recreated the cockpit of a land speed vehicle for a live action shoot. Eventually we replaced the entire element. I set up dirt and streak passes for comp, developed a render layer system suited to our needs, and collaborated with fx to make sure fx elements were casting shadows and refracting. The client and agency was happy with the shot. Remeshed CAD elements with Zbrush and Quad Draw, repurposed in house procedural shaders for new assets, incorporated Mega Scans materials.



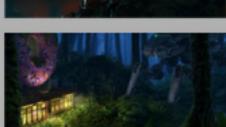
Matte Painting, Compositing
 I created a matte painting for the treeline, I brought back detail in the sky from the original plate, I added mist elements coming off the water in the fg.



Lighting, Modeling, Materials, Character Design
 Researched and concepted character in 2D, explored multiple options in thumbnail form, wrote up character history to inform design decisions, sculpted hard surface/textiles/organics in zbrush, textured assets in painter, generated hair and stubble in maya, rendered in arnold.



Look Development
 I textured a high poly ant in Substance Painter, set up shading in Arnold, submitted turntable renders for review in an iterative improvement process, published assets within pipeline.



Matte Painting, Design, Lighting, Compositing, Modeling
 For this project I created a fully 3d matte painting by projecting the main matte into the diffuse channel of the scene and modelling it out. I developed the 2d matte in conjunction with the 3d scene by bringing 3d lighting and fog passes into the 2d matte to preview the final result. I created procedural plants and optimized them to catch lighting and blend with the matte. I did additional texturing and projected it back into the scene in layers. I baked down surfaces that needed GI to speed up the final render. I integrated many small 2d details and projected them in comp.