

Showreel Breakdown Sheet

Superman Returns (2006)

Studio: Sony Imageworks

Software: RenderMan, Maya, Proprietary Lighting Tools

Contribution: Maintained existing shader libraries, added new shaders, and extended existing shaders for increased capability and efficiency using new (to this studio) techniques. Resurrected the virtual crowds system and adapted it to a Maya particle pipeline. Extended the procedural animation system for the Virtual Cars pipeline, rendered and composited all cars and people for the rooftop talk and "metropolis disaster" sequences.

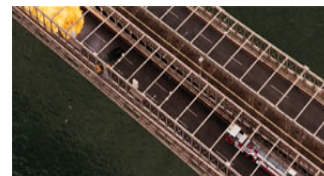


Fantastic Four (2005)

Studio: Meteor

Software: RenderMan, Slim, Maya

Contribution: Lead TD for bridge crash sequence, which was filmed on a 75 foot open-air set in Vancouver. Practical set photography was augmented with CG bridge extensions, cars, water, and surrounding city. I designed a new "[hybrid ambient occlusion](#)" and HDR environmental lighting pipeline, organized bridges into sections for load-on-demand rendering, baked ambient occlusion caches, rendered CG bridge extensions, cars, and other CG elements, and supported other lighters in our department.

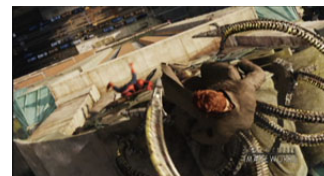


Spider Man 2 (2004)

Studio: Sony Pictures Imageworks

Software: RenderMan, BIRPS, Bonsai

Contribution: TD on the "Virtual Buildings" team. I matched set extensions to live action set pieces and rendered full CG backgrounds, also composited building layers to prepare final CG BG plates.



Matrix Revolutions (2003)

Studio: ESC Entertainment

Software: Maya, Mental Ray

Contribution: TD for "Super Burly Brawl" sequence, look development & rendering for virtual humans, author of "skycap" job queueing system and scripts to automate element rendering.



Matrix Reloaded (2003)

Studio: ESC Entertainment

Software: Maya, Mental Ray

Contribution: Rendered muzzle flash, bullet, bullet wake elements for "Trinity Falls" and "Trinity Saves" sequences in addition to writing several key render pipeline scripts.



The One (2001)

Studio: Tippett Studio

Software: Maya, Mental Ray

Contribution: Look development, shader tweaking, final rendering for smoke elements in the swirling "transporter column".



Evolution (2001)

Studio: Tippett Studio

Software: Maya, Mental Ray

Contribution: Rendered all elements for the mosquito creature. Maintained the surface shaders.



Hollow Man (2000)

Studio: Tippett Studio

Software: Maya, Mental Ray

Contribution: Wrote the shaders used for the skin in the smoke character. The smoke texture is a variant on standard 4-D Perlin noise written in C. This "Perlin stub" was written to be compiled into a RenderMan DSO and a Maya shading node so that the same code would generate the same smoke texture in both programs, allowing the look to be tweaked interactively and allowing the surface to act as an emission density map for particles.

