

- Instead of creating a ray for each pixel, stochastically determine a subset of pixels to render per frame



NYU

Appearance Presets

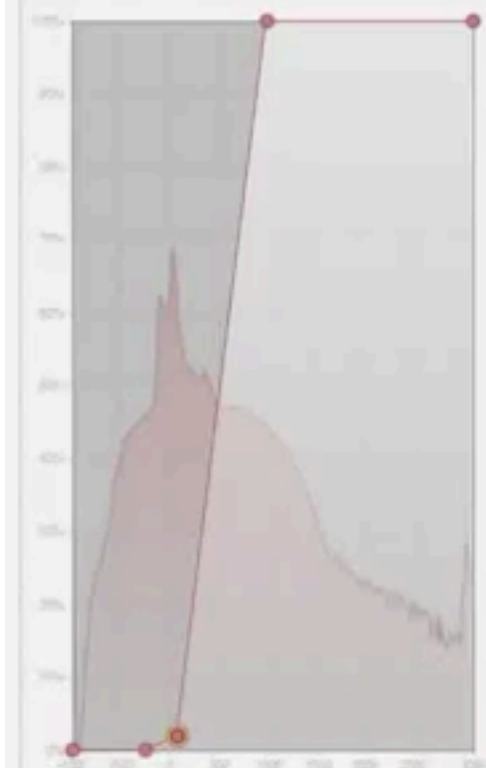
manix_small_demo [star] [T] [X]

Density Scale 0.573

Shading Type BRDF Only

Gradient Factor 35.947

Transfer Function



Node Selection

Node 3 [H] [L] [R] [B] [X]

Node Properties

Intensity 82.45

Opacity 0.019

Diffuse [black]

Specular [black]

Glossiness 0.000

Emission [black]



Camera Presets

manix_small_demo [star] [T] [X]

Film

Type HDTV (video)

Film width 400 1920 x 1080 490 x 270

Film height 500 1280 x 720 320 x 180

Exposure 0.00

Aperture

Size 0.000 mm

Projection

Field of view 24.56 deg.

Focus

Type Automatic

Focal distance 1.86 m

Log

00:12:14 [i] 'manix_small_demo' appearance preset saved
00:10:50 [R] Render canvas resized to: 400 x 500 pixels
00:10:50 [R] Render canvas resized to: 400 x 50 pixels
00:10:49 [R] Render canvas resized to: 400 x 576 pixels
00:10:49 [R] Render canvas resized to: 40 x 576 pixels
00:10:34 [R] Render canvas resized to: 800 x 600 pixels
00:10:34 [M] Device memory: 425.37/1248.44 MB
00:10:34 [P] Rendering started
00:10:34 [M] Copying gradient magnitude to device
00:10:34 [M] Copying density volume to device
00:10:34 [M] Current CUDA runtime version: 4.0
00:10:34 [M] Current CUDA driver version: 4.0
00:10:34 [M] Found 2 CUDA enabled device(s)

Statistics

Performance		
Timings		
Render Image	7.95	ms.
Blur Estimate	0.57	ms.
Post Process Estimate	0.21	ms.
De-noise Image	0.14	ms.
FPS	71.38	Frames/Sec.
No. Iterations	580	Iterations
Volume		
File	manix_small.mhd	
Bounding Box		
Min	[0.00, 0.00, 0.00]	m
Max	[0.78, 1.00, 0.78]	m
Physical Size	250.00 x 322.00 x 250.00	mm
Resolution	256 x 230 x 256	Voxels
Spacing	0.98 x 1.40 x 0.98	mm
No. Voxels	15073280	Voxels
Density Range	[-1000, 3095]	
Memory		
CUDA Memory		
Density Buffer	28.75	MB

Appearance Presets

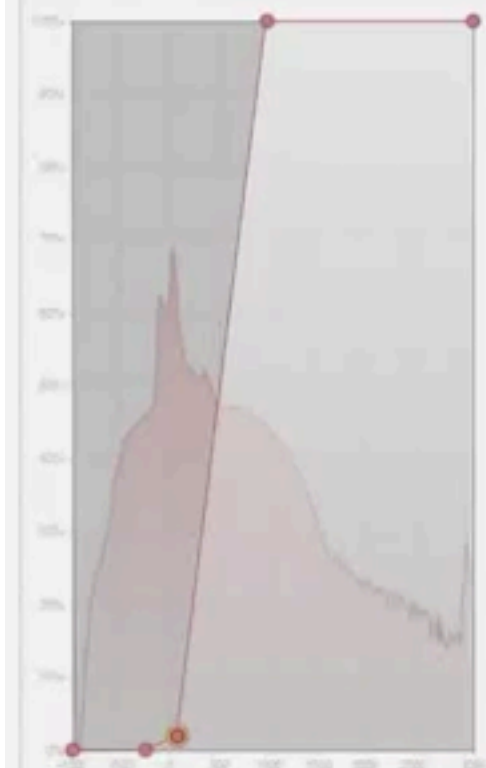
manix_small_demo [star] [T] [X]

Density Scale 0.573

Shading Type BRDF Only

Gradient Factor 35.947

Transfer Function



Node Selection

Node 3 [H] [L] [R] [B] [X]

Node Properties

Intensity 82.45

Opacity 0.019

Diffuse [black]

Specular [black]

Glossiness 0.000

Emission [black]



Camera Presets

manix_small_demo [star] [T] [X]

Film

Type HDTV (video)

Film width 400 1920 x 1080 490 x 270

Film height 500 1280 x 720 320 x 180

Exposure 0.00

Aperture

Size 0.000 mm

Projection

Field of view 24.56 deg.

Focus

Type Automatic

Focal distance 1.86 m

Log

00:12:14 [i] 'manix_small_demo' appearance preset saved
00:10:50 [R] Render canvas resized to: 400 x 500 pixels
00:10:50 [R] Render canvas resized to: 400 x 50 pixels
00:10:49 [R] Render canvas resized to: 400 x 576 pixels
00:10:49 [R] Render canvas resized to: 40 x 576 pixels
00:10:34 [R] Render canvas resized to: 800 x 600 pixels
00:10:34 [M] Device memory: 425.37/1248.44 MB
00:10:34 [P] Rendering started
00:10:34 [M] Copying gradient magnitude to device
00:10:34 [M] Copying density volume to device
00:10:34 [M] Current CUDA runtime version: 4.0
00:10:34 [M] Current CUDA driver version: 4.0
00:10:34 [M] Found 2 CUDA enabled device(s)

Statistics

Performance		
Timings		
Render Image	7.95	ms.
Blur Estimate	0.57	ms.
Post Process Estimate	0.21	ms.
De-noise Image	0.14	ms.
FPS	71.38	Frames/Sec.
No. Iterations	580	Iterations
Volume		
File	manix_small.mhd	
Bounding Box		
Min	[0.00, 0.00, 0.00]	m
Max	[0.78, 1.00, 0.78]	m
Physical Size	250.00 x 322.00 x 250.00	mm
Resolution	256 x 230 x 256	Voxels
Spacing	0.98 x 1.40 x 0.98	mm
No. Voxels	15073280	Voxels
Density Range	[-1000, 3095]	
Memory		
CUDA Memory		
Density Buffer	28.75	MB

Appearance Presets

manix_small_demo

Density Scale

Shading Type BRDF Only

Gradient Factor

Transfer Function

Node Selection

Node 3

Node Properties

Intensity

Opacity

Diffuse

Specular

Glossiness

Emission



Camera Presets

manix_small_demo

Film

Type HDTV (video)

Film width 400 1920 x 1080 490 x 270

Film height 500 1280 x 720 320 x 180

Exposure

Aperture

Size

Projection

Field of view

Focus

Type Automatic

Focal distance

```

00:12:14 'manix_small_demo' appearance preset saved
00:10:50 Render canvas resized to: 400 x 500 pixels
00:10:50 Render canvas resized to: 400 x 50 pixels
00:10:49 Render canvas resized to: 400 x 576 pixels
00:10:49 Render canvas resized to: 40 x 576 pixels
00:10:34 Render canvas resized to: 800 x 600 pixels
00:10:34 Device memory: 425.37/1248.44 MB
00:10:34 Rendering started
00:10:34 Copying gradient magnitude to device
00:10:34 Copying density volume to device
00:10:34 Current CUDA runtime version: 4.0
00:10:34 Current CUDA driver version: 4.0
00:10:34 Found 2 CUDA enabled device(s)

```

Performance		
Timings		
Render Image	7.95	ms.
Blur Estimate	0.57	ms.
Post Process Estimate	0.21	ms.
De-noise Image	0.14	ms.
FPS	71.38	Frames/Sec.
No. Iterations	580	Iterations
Volume		
File	manix_small.mhd	
Bounding Box		
Min	[0.00, 0.00, 0.00]	m
Max	[0.78, 1.00, 0.78]	m
Physical Size	250.00 x 322.00 x 250.00	mm
Resolution	256 x 230 x 256	Voxels
Spacing	0.98 x 1.40 x 0.98	mm
No. Voxels	15073280	Voxels
Density Range	[-1000, 3095]	
Memory		
CUDA Memory		
Density Buffer	28.75	MB

STOCHASTIC SAMPLING

- Instead of creating a ray for each pixel, stochastically determine a subset of pixels to render per frame

