

# RTX-Explore

## DXR Path Tracer

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# Current Progress

# **MILESTONE II - Part 1**

Path Tracing Pipeline







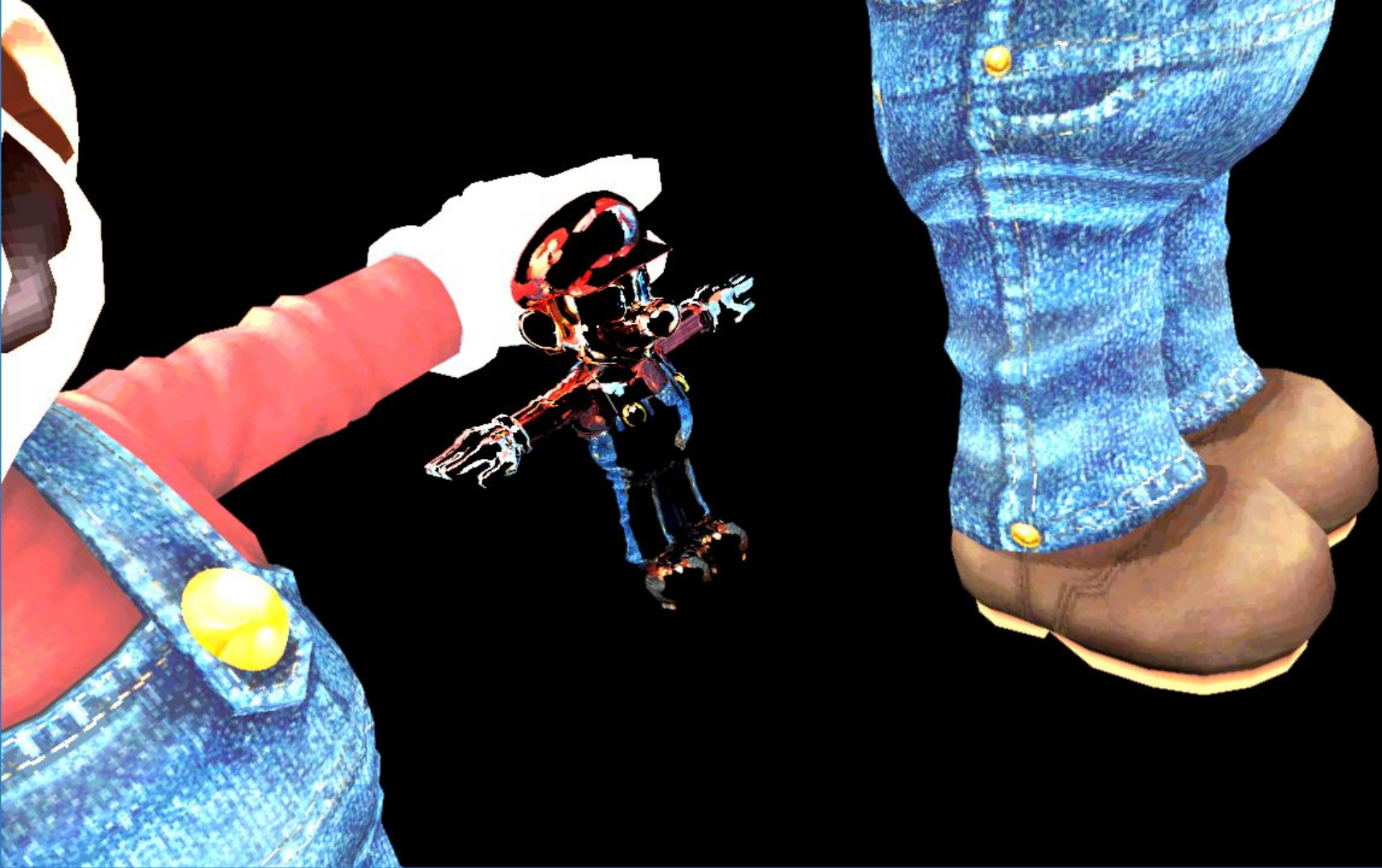
# **MILESTONE II - Part 2**

Diffuse, Reflective, Refractive, Fresnel, Schlick



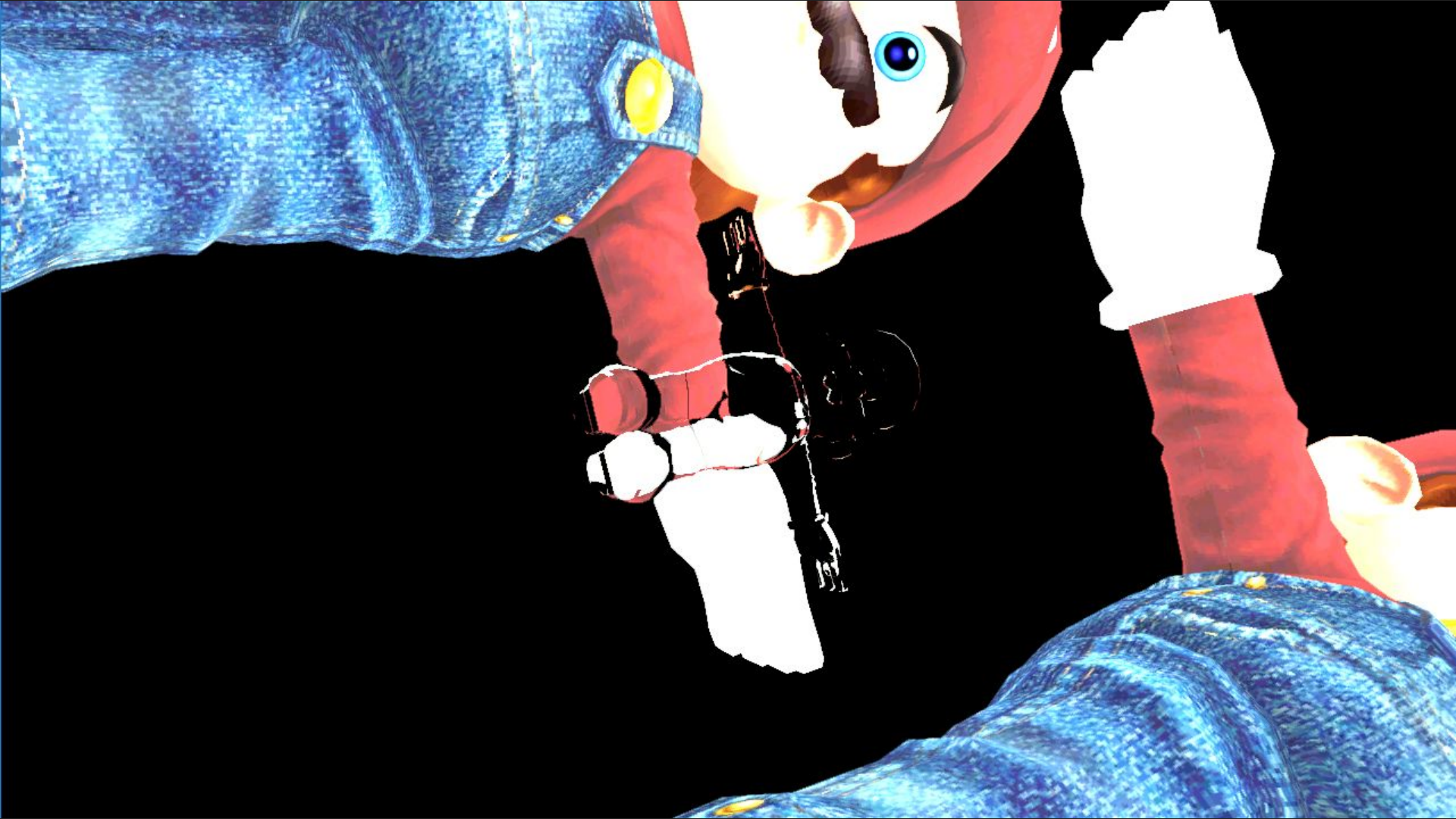


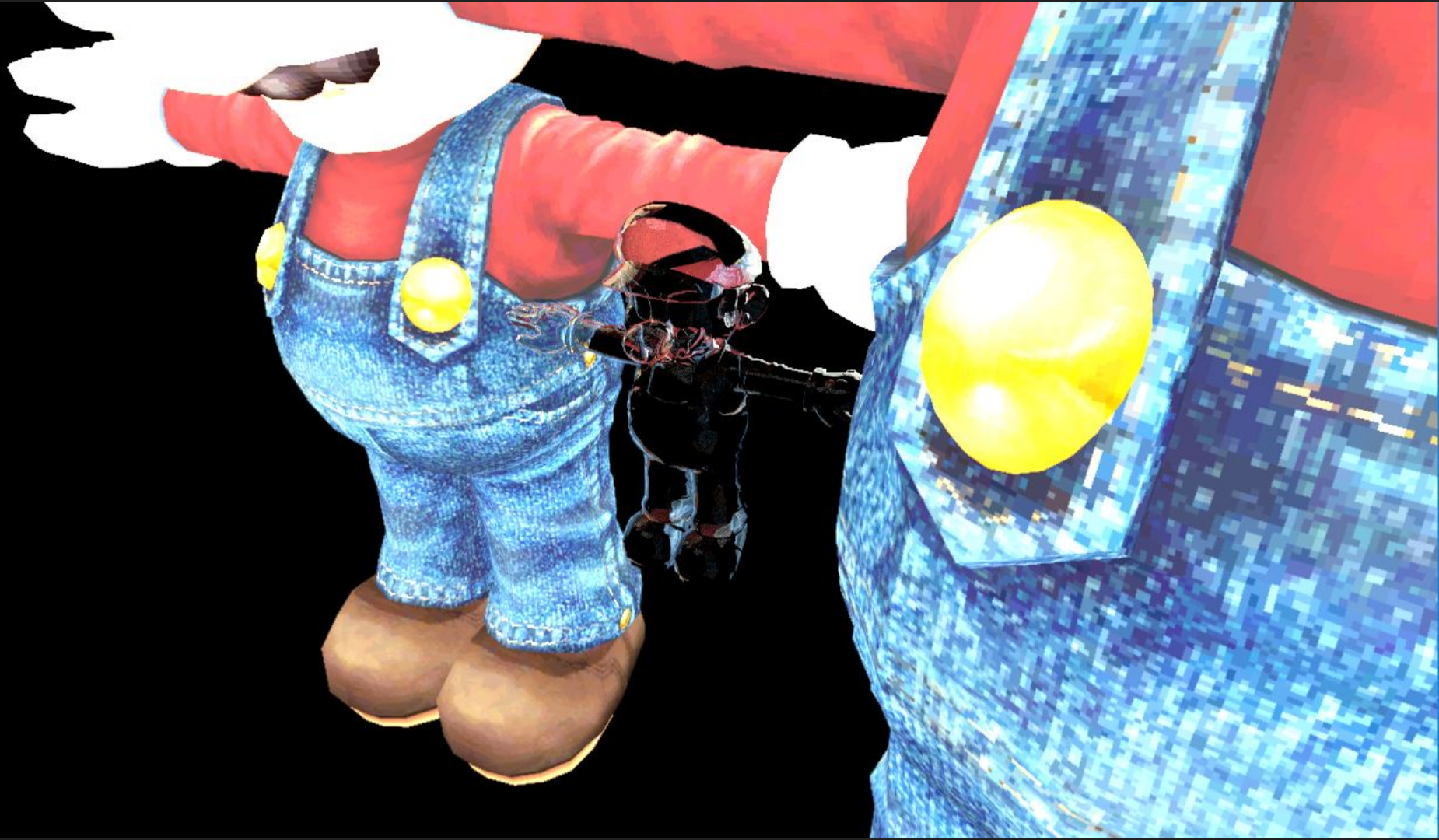












# **MILESTONE I - Part 3**

Scene Loading (multiple objects, multiple materials, multiple textures)

```
MODEL 1
path src/objects/dragon.obj
```

```
MODEL 2
path src/objects/wahoo.obj
```

```
MODEL 3
path src/objects/aline.obj
```

```
MODEL 4
path src/objects/chromie.obj
```

```
TEXTURE 1
path src/textures/chromie.jpg
```

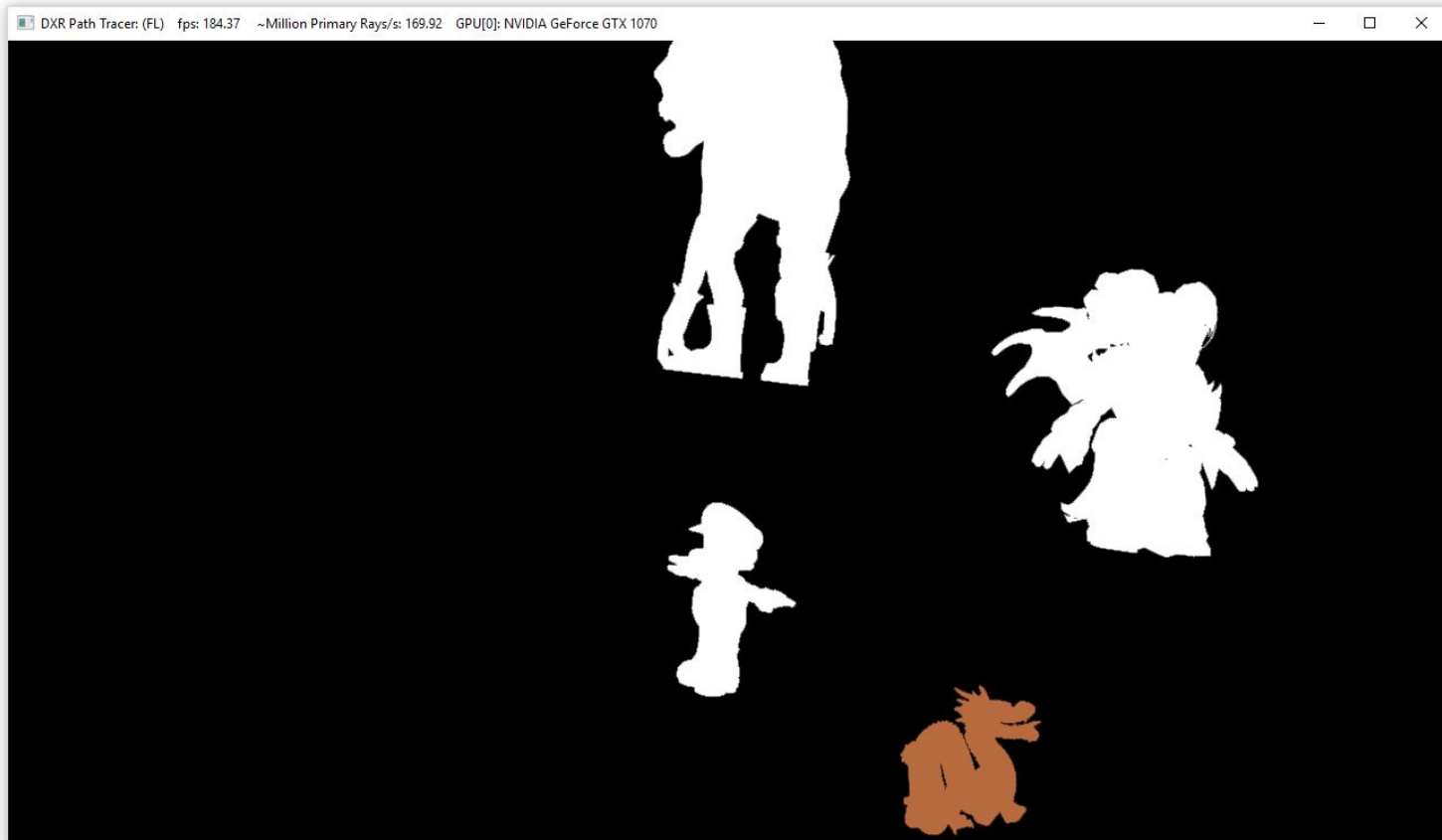
```
TEXTURE 2
path src/textures/normal.jpg
```

```
OBJECT 1
model 1
albedo_tex 1
normal_tex 2
material -1
trans      10 0 0
rotat      0 160 0
scale      2 2 2
```

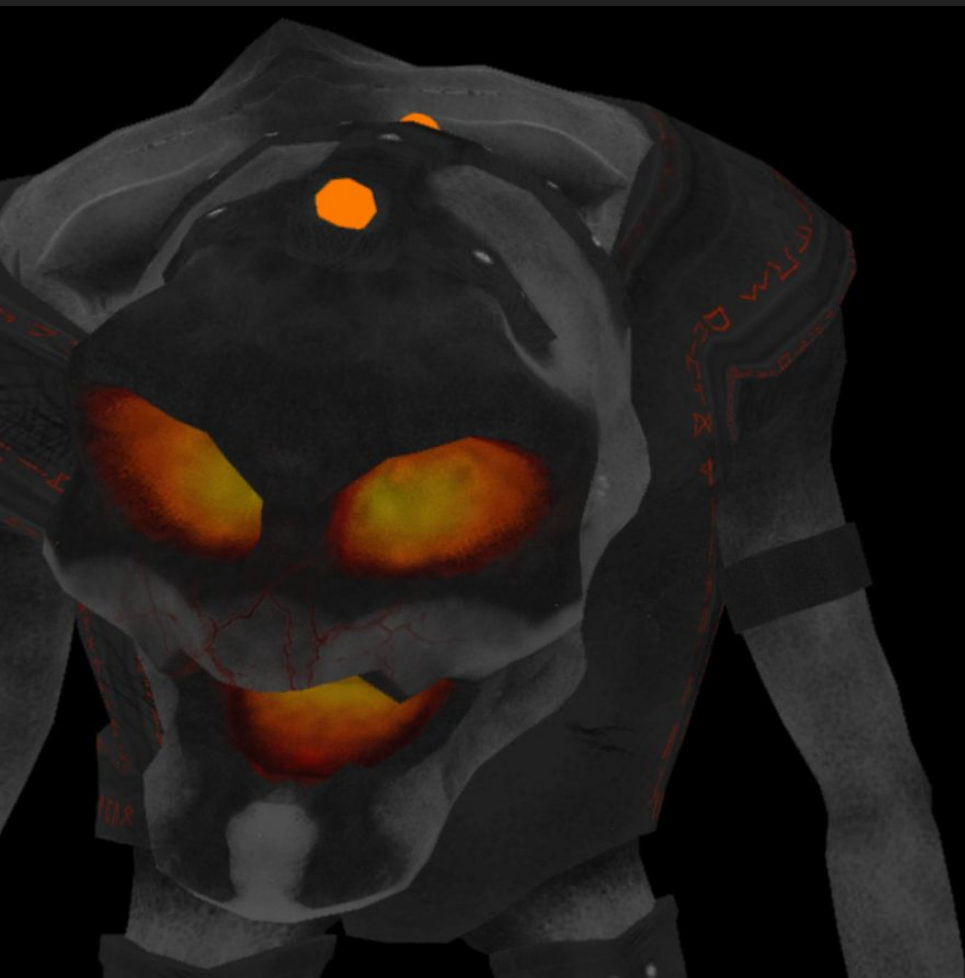
```
OBJECT 2
model 2
albedo_tex 1
normal_tex 2
material -1
trans      0 -1 0
rotat      0 160 0
scale      0.5 0.5 0.5
```

```
OBJECT 3
model 3
albedo_tex 1
normal_tex 2
material -1
trans      0 4 0
rotat      0 160 0
scale      1 1 1
```

```
OBJECT 3
model 4
albedo_tex 1
normal_tex 2
material -1
trans      0 1 10
rotat      0 90 0
scale      0.4 0.4 0.4
```









# Upcoming Goals

# **MILESTONE III**

Fresnel & Schlick (done)

Dispersion

Subsurface scattering

Finish scene loading

Another application of raytracing (?)