

Year of the Rat

PROJECT 1

Megan | CS557 | 1/15/20

Images

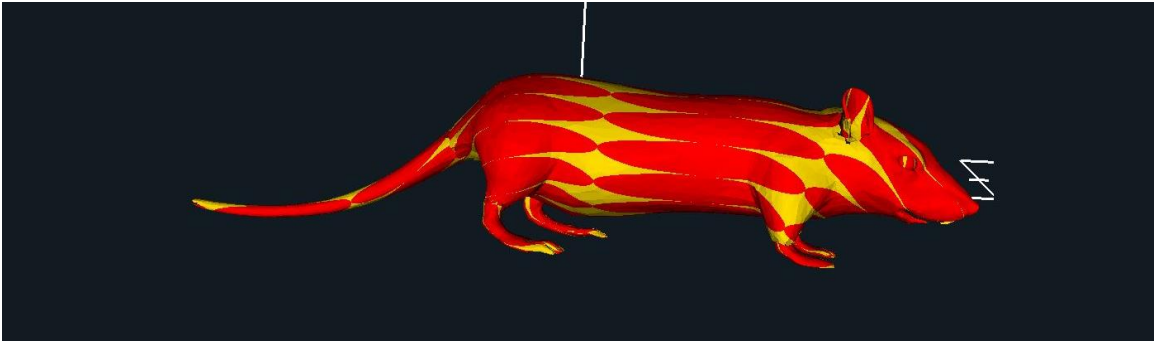


Figure 1: Long Horizontal Ellipse

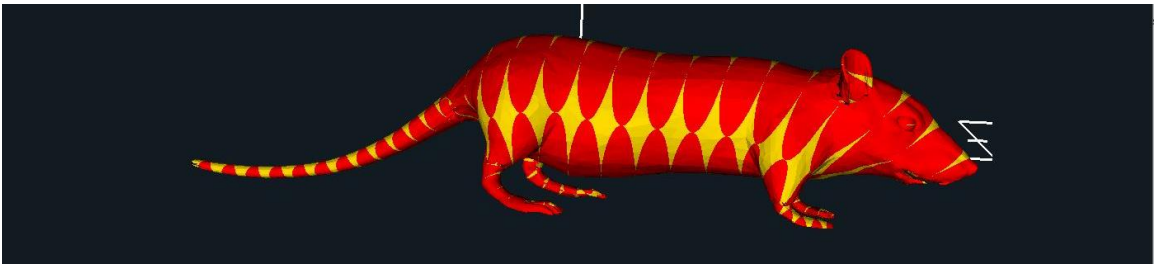


Figure 2: Long Vertical Ellipse

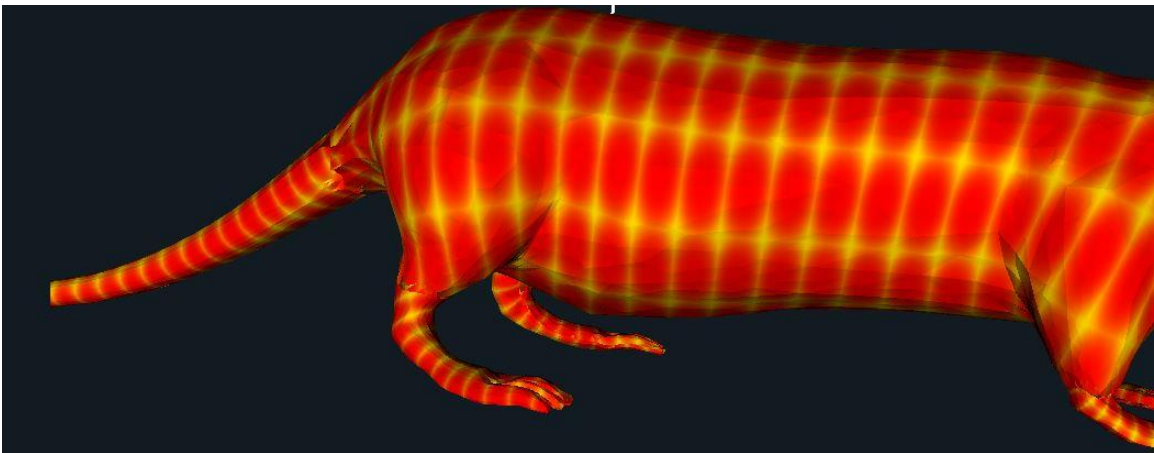


Figure 3: Blurred Ellipse Edges

KEY CODE

```
float Ar = uAd/2.;
float Br = uBd/2.;
int numins = int ( vST.s / uAd );
int numint = int ( vST.t / uBd );
float sc = numins * uAd + Ar;
float tc = numint * uBd + Br;

float ellipse = (pow(vST.s - sc,2)/pow(Ar,2))+(pow(vST.t - tc,2)/pow(Br,2));

float d = smoothstep( 1. - uTol, 1. + uTol, ellipse );
vec3 rgb = vLightIntensity * mix( RED, YELLOW , d );

gl_FragColor = vec4( rgb, 1. );
```

VIDEO LINK

https://media.oregonstate.edu/media/t/o_h95p2j2d